A Framework for Understanding the Distinctive Characteristics of an Outdoor Setting Pedagogy: a comparative primary education case study approach

Leigh Jane Hoath

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Abstract

This thesis examines the characteristics of an effective pedagogy in the outdoor setting in the primary age phase of schooling. It explores teachers' practice with a tight focus on teaching rather than learning. The two participating schools were comparable in terms of city centre locations, number of pupils on roll and Ofsted Inspection outcomes, but differed in that one supported an established and dedicated approach to using the outdoor setting whereas the other made more *ad hoc* use of the outdoors for teaching. The study was conducted over an eighteen month period.

Observations of teaching inside in the classroom and within the school grounds took place alongside interviews with teaching staff and the Senior Leadership Teams. The data from the two schools were compared and contrasted using Nvivo as a tool for supporting data management and analysis. Drawing on a range of theoretical perspectives such as Bernstein's (1981) recognition and realisation rules and Aikenhead's border crossing (1997, 2001) this analysis produced five distinct characteristics of teaching in the outdoor setting.

These five characteristics highlight the importance of supporting transitions across the boundary between the classroom and outdoor setting and *vice versa*, making frequent use of the outdoors and preparing children both physiologically and psychologically before leaving the classroom. There is also the suggestion that transition back into the classroom requires management in a similar manner. The study contributes to the research base in this field by applying the concept of Bernstein's weaker framing to the framework for effective pedagogy as a means of explaining changes in children and teachers' dialogue between the classroom and outdoor setting and supporting better practice. It also utilises Vygotsky's Zone of Proximal Development and More Knowledgeable Other as a means of translating the characteristics emerging from this study into practice.

Implications for practice are presented and these suggest the distinct characteristics emerging from this study are important as the National Curriculum for England includes specific detail of where there are opportunities for teaching outside the classroom. The thesis also proposes the pedagogical framework of characteristics developed in this study offers potential for other age-phases and educational settings beyond the primary school as well as within Initial Teacher Education.

Contents

Chapter 1

Introduction

The purpose of this introductory chapter is to provide a context for how this study evolved and to establish my position as a researcher ontologically and epistemologically as this influenced the design, collection and analysis of the data collected. To begin with it outlines my professional interests and a personal rationale which highlights the experiences in my career which have informed my thinking and led me towards developing questions relating to teaching in outdoor settings. The subsequent section considers a more theoretical journey in relation to my evolving ideas and position as a researcher and highlights some of the tensions and challenges I faced undertaking this study. It includes discussion around exploring subjectivity and the impact of this on research design and data analysis and serves as an introduction to Chapter 3 where the methodology and research design are presented fully. Key government policies, which aimed to increase the emphasis on teaching and learning in the outdoors, are also introduced and considered to offer a wider context for my study. The extent to which their guidance and policies have been implemented is raised as a point for deliberation and evaluation; although this was not a focus of this study it is relevant to the context in terms of the varied range of teaching and learning in the outdoor setting that takes place in primary school settings.

It is worth noting that in this section there is some deliberate interchangeable use of terms referring to the outdoors (learning outside the classroom and outdoor learning,

for example) as they are used within the policies. The very specific focus, and subsequent use of precise terminology to describe the location of my study in the immediate school grounds, is justified and explained in the Literature Review chapter. The introduction will conclude by identifying the research questions the study addressed and outlining the structure of the remainder of this thesis.

1.1 Personal Rationale

My professional life as a teacher involved a range of outdoor experiences from day visits, weekend residentials, leading the Duke of Edinburgh's Award, ski trips through to month long expeditions to developing counties. These were in addition to undertaking field work as an integral part of teaching Biology in two different secondary schools. A move to work in Initial Teacher Education (ITE) presented the opportunity to maintain this interest through both Post- and Undergraduate residential field trips as well as developing and teaching a module entitled 'Education Beyond the Classroom'.

The dynamics of interrelationships on such outdoor experiences are clearly complex; a personal judgement based upon observations of teachers and children when stepping outside the classroom. Children that could be described as difficult and challenging within school were often near-model pupils when on the ski trip; they appeared to establish more positive relationships with their peers and teachers that were generally not evident whilst in school. Conversations with staff involved

formed anecdotal evidence that the impact of such experiences is extremely positive and beneficial to all involved. At the time I never asked myself why this was so: why children interacted more positively with each other and their teachers; why teachers appeared toform better relationships with the children; why these experiences are almost without exception considered to be of great benefit; what those benefits actually were; I simply enjoyed the experience and believed the children did too.

In a previous study (Hoath 2009) I explored participants' perceptions of a Duke of Edinburgh expedition and through undertaking this it occurred to me that the focus of my study at the time, and reading around the area, was the children. This raised questions in my mind about what it is that the teachers do to contribute to the changes observed in the children. At what point is what the teachers are doing significant, not necessarily on these further afield trips but in the everyday teaching in the immediate school environment? Wanting to link this research with my everyday work in Higher Education and with school colleagues I began to consider the role of the teacher in learning outside the classroom and if differences in their approach could be captured to create a picture of what makes for the most effective pedagogies. In an attempt to avoid the traditional 'field work' (the connotational meaning of this phrase is discussed in forthcoming chapters) predominantly associated with teaching science and geography I decided the primary school setting would be the focus for this study – my experience from working within Initial Teacher Education in Higher Education suggested primary school teachers, generally, make greater use of the school grounds to teach across a range of subjects.

I believe and expect that the construction of pedagogy in the outdoor setting will not only have a direct influence on my own practice working within ITE but also support classroom teachers more generally in extending their pedagogical repertoire when teaching in non-classroom settings. Ultimately the intention is to impact on providing high quality learning opportunities for children.

1.2 My Position as a Researcher

The Methodology chapter outlines and evaluates the data collection methods involved in this study however I feel it is also important to locate my work in relation to the position I hold as a researcher. This following section describes the challenges I faced in terms of a cognitive conflict between being a scientist looking for an answer to the questions I was raising and realising the complex reality of social research.

Peshkin (1998, p17) writes of researcher subjectivity suggesting that this is "an amalgam of the persuasions that stem from the circumstances of one's class, statuses, and values interacting with the particulars of one's object of investigation". He states that acknowledging the position held by the researcher is fundamental, implying that it is not possible to achieve the detached state of being able to "suspend thinking" (Reason and Rowen 1981, p123) or "suspend belief so that preconceptions and presuppositions about the world are put aside and the true phenomenon or essence is revealed" (Crotty 1996, p164). Reason and Rowen (1981) and Crotty (1996) present an idealised theoretical position which is potentially very difficult to achieve, arguably impossible, and so the best a researcher can do under such circumstances is

to, as Peshkin (1998, p17) suggests, "systematically identify their subjectivity throughout the course of their research".

Attempting to identify my subjectivity was a challenge from the beginning of the research process and certainly throughout its design. A premise of this study is that there are observable differences between teachers' teaching in the classroom compared with the outdoor setting. Consequently, this meant my study was based upon the view that a distinct nature of outdoor pedagogy exists and so this underpins the focus explored within this work. I therefore faced the challenge of having to question this assumption and design an observation and interview schedule which would not lead the participants to proffer views that served to meet my expectations whilst acknowledging the emergent data are shaped by the researcher-participant relationship and interview questions (and subsidiary questions). Attempting to identify where such tensions existed was paramount - not in order to be "released from subjectivity ... rather [to] enable myself to manage it" (Peshkin 1988, p20). This issue persisted through analysis of data; preconceptions should not be imposed, however I suggest it is difficult to achieve this ideal position of suspending my own thinking that Crotty (1996) advocates. By trying to identify and then challenge my own assumptions I believe it was possible to manage my subjectivity such that it allowed me to present an analysis of data which reached far beyond my own views. This analysis of data is presented fully within the Methodology chapter.

Central to the notion of determining a position as a researcher, and within a research community, is the paradigm developed through Kuhn's work which describes a paradigm as "a set of fundamental theoretical assumptions that all members of a

scientific community accept at a given time" (Okasha 2002, p81). Mertens (2010, p7) offers the view of a paradigm as a "way of looking at the world" and acknowledges the work of Guba and Lincoln (1994) in encouraging the researcher to identify her paradigmatic position. A consequence of my background in the 'hard' sciences, with a focus on quantitative approaches to research and data, was being forced to think critically about methodological issues. Ideas previously held in relation to objectivity, testable questions, achieving reliability and validity now seemed less compelling and relevant in the light of the information and experiences I have had since embarking upon the EdD. Contradictions appeared as a result of the difficulty and complexity of determining a researcher position and world-view and I was, and perhaps still am, continuing to try to reconcile these whilst accepting that this view is subject to continual reflection and evolution.

Guba and Lincoln's ontological question of "what is the nature of reality?" (Guba and Lincoln 1994, cited in Mertens 2010, p8) needed to be addressed by me, as researcher, in order to identify the impact of the views I hold upon my research. A framework supporting my research is the belief that reality is socially constructed and that an individual's reality is influenced by their life experiences. This view is one which complements my position as a researcher. My ontological position however influences what I know and how I know it. This is best described through the notion of inter-subjectivity and some shared understanding, as well as individual perspectives and positions, which allows a functional society as described by, amongst others, Searle (1996). As a result of this position, the relationship between the researcher and what can be known (epistemological questions) is seen as a manifestation of such individual experiences and is therefore highly subjective,

further supporting my view that attempting to suspend belief and put existing views to one side is both unachievable and inappropriate within my study. This equally applies to the research process where the influence of the researcher on participants and vice versa is inextricably linked. This in turn shapes data which emerge from the individual participants through observation and interview, informing the construction of the observation schedules, interview questions and subsidiary questions and the subsequent analysis and conclusions drawn from these data. As a result of these views I feel that this work and my views are most comfortably located within the Interpretive/Constructivist paradigm and this highlighted another challenge for me as a researcher to recognise and reconcile; what have I brought to the research process and how has this shaped the outcome?

An attempt to understand the meaning of what is being communicated in a specific timeframe and culture is known as hermeneutics and this position is closely associated with the Interpretive/Constructivist paradigm (Mertens 1998, p11). It supports the employment of qualitative methods although not to the exclusion of appropriate quantitative approaches. Qualitative methods are argued to yield what Mertens (1998, p14) describes as a "dialectical interchange" resulting in "better interpretations of meanings (hermeneutics) that are compared and contrasted". The tentative nature of exploring perspectives and multiple realities means that "research questions cannot be fully established in advance of this process" (Robson 2002, p27) and that "they will evolve and change as the study progresses" (Mertens 1998, p14). Schwandt (1994, p118) proposes that the researcher attempts to "understand the complex world of lived experience from the point of view of those who live in it" and I aimed to achieve this by adopting a research design which complemented this

theoretical position and yielded data to explore the perceptions held by the participants. Again, the methods used within my study are elaborated fully in Chapter 3.

1.3 Policy Context

This section introduces key government policies over time from 2006 to present day, related to teaching and learning outside the classroom. The main agenda for all of these policies was predominantly to encourage teachers to take their children into the outdoor setting; this included the use of school grounds, local communities and excursions further afield. The purpose of this section is to highlight the support directives that have been laid down to enhance the learning-outside-the- classroom experience for school-aged children. It also introduces literature which was published through supporting professional bodies such as the National Foundation for Educational Research (NFER) and the Field Studies Council (FSC) which outline the benefits of and some of the issues around teaching and learning in the outdoor setting.

Launched in 2006 the Labour Government's 'Learning Outside the Classroom (LOtC) Manifesto' set out a "vision to enable every young person to experience the world beyond the classroom as an essential part of their learning and personal development" (DfES 2006, online) and described the school grounds as a "rich multi-faceted, learning resource on the doorstep. They offer excellent opportunities for both formal and informal learning". As well as sharing a perspective on the

benefits of using the outdoors for teaching this manifesto pledged to create opportunities and resources for supporting learning outside the classroom. In 2008 the Council for Learning Outside the Classroom (CLOtC) was established by the Department for Children, Schools and Family (DCSF) to manage and lead Learning Outside the Classroom. The Council introduced a supportive website and the Learning Outside the Classroom Quality Badge (CLOtC 2008). However, a publication in 2010 by the Children, Schools and Families Committee (CSFC) suggested that these initiatives had not been as successful as anticipated and indicated levels of funding to support learning outside the classroom should be increased due to a noted lack of parity with other initiatives (such as the school's Music Manifesto launched in 2007 by the DCSF). The CLOtC report (2010) also urged the Quality and Curriculum Development Agency (QCDA) to include learning outside the classroom within all curricula and schemes of work. They also suggested Ofsted should comment on the extent and quality of such learning through their inspection regime (CSFC 2010) however the 2015 Framework for School Inspection (Ofsted 2015) makes no specific mention of teaching and learning in a setting other than the classroom.

Rickinson *et al.*'s 2004 review of outdoor learning suggests the use of the school grounds positively impacts upon children across a number of domains - cognitive, affective, interpersonal and physical/behavioural. Many publications for example, Beames *et al.* (2012), Waite (2011) and Bianchi and Feasey (2011) support the view that working outside the classroom offers many positive benefits for children and their learning. Waite (2011, p25) offers that the greater "sense of wellbeing, freedom and enjoyment the children gain from being outdoors aids motivation …

and so benefit from the sense of being free which the outdoors can offer". Rickinson *et al.* (2004, p53) however raise the point that, despite such claims of wide-reaching benefits, the emphasis when using the grounds lies elsewhere "rather than improving opportunities to learn in the environment [and] the lack of appropriate aims may well lead to missed opportunities for student learning". Rickinson *et al.*'s study explored how these opportunities for learning could be further enhanced through addressing the teachers' pedagogical approaches and attempted to bridge the gap to which Rickinson *et al.* (2004) refer. Neither the policy documents referred to within this section nor the publications cited address the key focus of this current study in supporting learning outside the classroom – the teachers' approaches to teaching in the outdoors, their pedagogy, and what makes this most effective in the outdoor setting. Despite there being a range of literature which encourages teaching in the outdoor setting there is an apparent gap in the area of the teachers' teaching approaches and pedagogies.

In 2005 Dillon *et al.* undertook a large scale, England based study, supported by the National Foundation for Education Research (NFER), involving three approaches (Case Study, Action Research and Stakeholder Consultation) and six primary schools visiting outdoor learning sites (school grounds, one rural and one city farm and two outdoor centres). One outcome of their study was, in part, to present a "typology that attempts to make sense of approaches to outdoor education and learning" (Dillon *et al.* 2005, p50). Their findings highlighted the need to "be clear about underlying pedagogical assumptions" and to demonstrate "on what pedagogic principles the added value of the 'outdoor classroom' is operating" (*ibid*, p70). Although indicating that pedagogy is important their study reveals an apparent

chasm between the *reality* of reflective practice to acknowledge such pedagogical practice and the *ideal* Dillon *et al.* (2005) propose. This is not a criticism of the teaching profession but rather a reflection of the demands placed upon teachers and the limited time they have to dedicate to such practices and, as Beames *et al.* (2012, p107) state, "many teachers are over-worked and, quite rightly, see changes to learning content and approaches to delivery as an additional burden on their limited time".

A review of UK government documentation reveal little evidence of new policies or guidance relating to teaching in the outdoor setting. Opportunities for using the outdoors for teaching in areas such as Key Stage 1 and 2 Science (DfE 2014) are highlighted and encouraged and the CLOtC maintains an active dissemination of information relating to teaching and learning outside. This Council relates resources with the changes in government policy (such as the new National Curriculum, changes to Ofsted inspection frameworks) and is trying to increase awareness of the benefits of teaching in the outdoor setting through an annual conference, awards for outstanding contribution to learning outside the classroom and offering a quality mark for schools which recognise and promote such learning.

The last ten years therefore has seen working outside the classroom appearing on the political agenda with some consistency and from a variety of educational bodies; it has become more widely recognised as an important aspect of teaching and learning. However as this introductory chapter has indicated, and my own professional

experience suggests, the emphasis on teaching and learning in the outdoors has not, and is not, necessarily being translated into practice.

The following section presents the research questions which have arisen as a result of my interests in this area and focus on the teachers' teaching in the outdoor setting rather than the children's learning.

1.4 Research Questions

There are two key research questions this study aimed to address. The first focussed on establishing the distinctive features of effective pedagogy when teaching in the outdoor setting. This question was addressed predominantly through observation and, to some extent, discussion in interviews. The second question explored teachers' perceptions of teaching in the outdoor setting and was explored through the interview process. These questions together offered a rich understanding of teachers' teaching in the outdoor setting.

Research Question 1: What are the distinctive features of effective pedagogy for teaching in the outdoor setting?

Research Question 2: What are teachers' perceptions of teaching in the outdoor setting?

Changes in children's behaviour when in the outdoor setting rather than the classroom are well documented (and explored more fully in the subsequent chapters) and have been observed through my own professional practice as a teacher and working within Initial Teacher Education. The emphasis of policy and existing literature on children's learning does not take into account the teachers' responses to the children's behaviours in the outdoors and as a result there is little support or guidance for the teacher's developing their practice in this setting. Through observation of teaching in a school with established use of the outdoor setting (again, the participant schools are described in detail in Chapter 3) and comparing this with a school where use is more *ad hoc*, this study aimed to explore differences in the teaching approaches used within the two schools. The purpose of the first research question was to focus the study on the teaching taking place, identify differences in the teaching approaches between the two schools and capture these as a means of developing a framework for an effective outdoor setting pedagogy. To further elucidate the observations of the teacher's teaching it was important to explore their perceptions of their teaching approaches, their views on the differences between teaching within the classroom and the outdoor setting and to be able to explore how any differences had evolved and the impact of these on practice. As such the second research question aimed to tackle these areas through the use of interviews.

1.5 Outline of Thesis

Having established a personal, professional and policy-based context for the study in this introductory chapter the following chapter is a literature review which draws

upon existing literature to further contextualise this study as well as exploring and defining key terms. This is followed by some discussion of the key theories which underpinned the development of the study, drawing predominantly on Aikenhead's studies of border crossing and Bernstein's recognition and realisation rules. Chapter 2 sets these in context and explores their application within my study.

Chapter 3 outlines the research design including the methods used to collect and analyse the data. There is some discussion around the choice of approaches and the development of the methods through a pilot phase before concluding with ethical considerations.

The findings from the study are described in Chapter 4 under two headings of Behaviour and Teaching. The Behaviour section addresses a number of areas which emerged from the study and begins with considering changes in the children's behaviour and the impact of novelty before describing teacher disapproval and behaviour management in both settings. The behaviour section concludes by illustrating changes in relationships when teaching in the outdoors before Teaching is presented. This section is further divided into three areas for consideration. The first of these is consideration of a classroom-dominated approach to teaching in the outdoor setting, planning and assessment followed by the role of Continuing Professional Development (CPD) and teacher support. The final area is of teacher confidence which concludes this chapter before the findings are discussed.

Chapter 5 which makes use of existing literature to explain the findings previously described. The chapter broadly follows the structure of the findings chapter, discussing the areas under the headings of Behaviour and Teaching. This chapter draws out five specific characteristics of effective pedagogy for teaching in the outdoor setting and presents a simple model which illustrates the outcomes from the research. The work of Bernstein, Aikenhead and Vygotsky is used to explicate the findings and offer a means for operationalising the model before the chapter concludes with summarising an effective outdoor setting pedagogy.

The final chapter offers a response to each of the research questions before suggesting how the findings from this study can impact on future practice supporting teaching across a range of age phases and subject areas. The potential for developing pedagogy across education with this model is vast and specific examples are presented in this section of the chapter. Areas for further study are also identified which will contribute to the limited field of knowledge in this area. The chapter concludes with reflection from a personal perspective and of the adopted methodology.

Chapter 2

Literature Review

This chapter considers existing studies and literature which are pertinent to my study. Key terms of reference are then presented before considering literature which relates to the pedagogy of teaching in the outdoor setting. The theoretical frameworks which support and underpin this study are then presented, with a strong focus on work by Basil Bernstein and Glen Aikenhead; in particular, the concept of 'Border Crossing' and the impact of teaching across boundaries between the classroom and the outdoor setting. Other concepts from the literature, such as Shulman's Pedagogical Content Knowledge (PCK), are referred to in order to create a more holistic view of the central underpinning theories. Vygotsky's work relating to the Zone of Proximal Development (ZPD) and the notion of a More Knowledgeable Other (MKO) are also introduced as these are central to the final discussion in Chapter 5.

The following section will explore key terms of reference for the work before considering existing literature and its limitations and identifying theoretical frameworks which underpin this study.

2.1 Key Terms of Reference

Existing literature around learning outside the classroom adopts a number of terms which are used interchangeably and so for the purposes of this work it is important to

be clear and specific about what is meant by key terms to avoid, as far as possible, ambiguity and misinterpretation and also to acknowledge where such ambiguity exists. Many terms associated with working outside the classroom are bound in specific and connotational meaning. The decision to use the term 'outdoor setting' as a descriptor for the context of my study is derived, in many ways, through the consideration and subsequent elimination of these other terms. *Field work*, for example, whilst describing the activities children undertake in the primary setting traditionally holds connotations of secondary school ecology and geology – although the Association for Science Education's Outdoor Science Working Group (2011, p3) describes the term to mean "educational activities from early years through to post-16 which take place outside the classroom and make use of the outdoor natural and built environments". It is a term, however, that is not frequently used within and associated with a primary phase setting and is therefore rejected for the purpose of this work. *Outdoor space* and some comparison of different 'spaces' children encounter was another term considered for this study. Lefebvre's (1991) work, "The Production of Space", indicates the complexities of defining this term and its use within this study would undoubtedly result in immediate shortfalls of the content not matching the expectations associated with the word. Rickinson *et al.* (2004, p9) define *outdoor learning* as "learning that accrues or is derived from activities undertaken in outdoor locations beyond the school classroom" and whilst this is helpful, the term concentrates on the learning as opposed to the teaching where the emphasis of this study lies. Similarly the *outdoor classroom* does not support the key focus of exploring and examining the pedagogical differences between the traditional classroom and teaching outdoors. This term has strong connotational meaning to both teachers and their children and so does not distinguish the difference in context

between the indoor classroom and outdoor setting; it potentially encourages teachers to adopt the same approaches outdoors as they would within the classroom environment.

The term outdoor setting within the context of this study also has a very specific physical location. Beames *et al.* (2012, p6) describe four zones of learning (Figure 1) and their research focussed upon the first two of these – School Grounds and Local Neighbourhood. The focus for my study is teaching within the school grounds and it is this to which the use of the term outdoor setting refers.

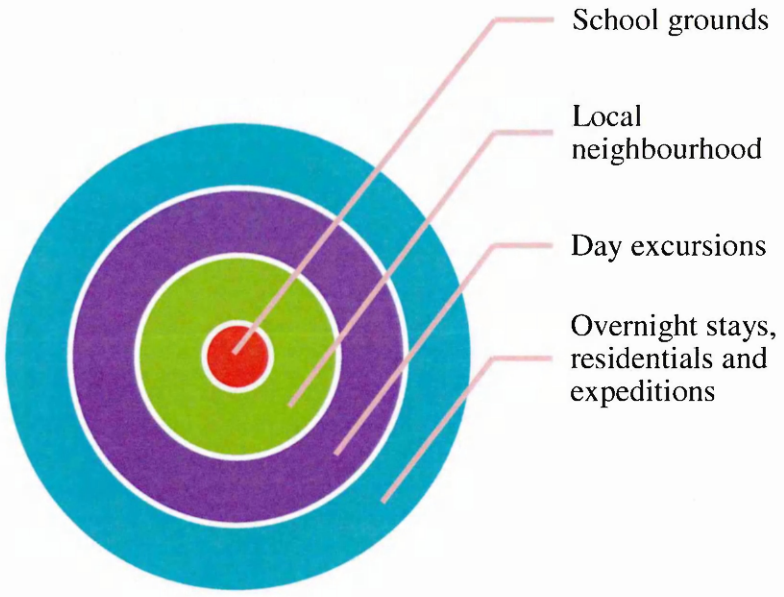


Figure 1 Four Zones of Learning
Taken from Beames *et al.* (2012, p6)

The following section explores, in more detail, the notion of pedagogy and its relationship with teaching in the outdoor setting and will introduce the first theoretical construct of Pedagogical Content Knowledge.

2.2 Pedagogy of Teaching in the Outdoor Setting

This study is concerned with teaching children in Key Stages 1 and 2 within the school grounds, age phases that Beames *et al.* (2012, p5) suggest "are often better positioned to foster learning outside the classroom than high schools" due mostly to flexibility within timetabling of the school day. Although they do not explicitly use the term pedagogy, Beames *et al.* discuss changes to teachers' teaching which are context and content-specific which suggests it is of at least some significance. This study is investigating the proposition that there are distinctive features (or characteristics) of an effective outdoor pedagogy and that in order to realise these in teaching the teacher needs to reflect upon their current practices and consider how they can be extended and adapted. Shulman's notion of Pedagogical Content Knowledge forms part of the foundation of this study.

Shulman (1986) introduced the concept of Pedagogical Content Knowledge (PCK) stating that content and context-specific strategies are needed to effectively to translate subject matter into effective learning experiences. In the context of this study this means that the teaching strategies being adopted should be specific to the outdoor setting and not simply the adoption of classroom practice to the outdoors. Development of such expertise is supported by both knowledge of those being taught and secure subject knowledge. Van Driel and Berry (2012, p26) describe "the complex nature of PCK as a form of teachers' professional knowledge that is highly topic, person, and situation specific". Beames *et al.* extrapolate this and after

describing the resources a teacher has at hand within the typical classroom (boards to write on, computers to convey images, books etc) they state:

> much of this changes if the teacher has access to an outdoor environment and chooses to take their class outdoors. In doing so, *the curriculum has not changed but the content has*, and in making this decision the teacher has to be mindful that this experience should enhance student learning rather than distract or detract. (Beames *et al.* 2012, p16)

This suggests that there is a need for the teacher to respond differently to teaching in the outdoors compared to the confines of the classroom where "teachers use their theoretical knowledge to help students develop an understanding of subject content" (Beames *et al.* 2012, p21). If, as Beames *et al.* (2012) suggest, the content changes and teachers draw upon theoretical knowledge to help children make sense of this content then the knowledge required to support the effective teaching of children in an outdoor setting is not going to be the same as that within the classroom. The basis of this study is my belief that the teacher's role in facilitating learning within the teaching environment is key and that although teachers may be good teachers within the classroom this is not necessarily transferable to the outdoor setting:

> Good classroom practice is not synonymous with good out-of-classroom practice; additional pedagogical knowledge and understanding are required for the latter. (Hoath 2015, p156)

This view is supported by Veal and MacKinster (1999, p12) who state:

> Pedagogical Content Knowledge is the ability to translate subject matter to a diverse group of students using multiple strategies and methods of instruction and assessment while understanding the contextual, cultural and social limitations within the learning environment

This study hypothesises therefore that teachers need to consider different pedagogical approaches when teaching in an outdoor setting and that it is only

through "adapting and extending the PCK of a classroom teacher that these [outdoor setting] experiences will become effective" (Hoath 2012, p103). The discussions within existing literature about pedagogy give rise to the first research question of this study relating to exploring the features of an effective pedagogy for teaching in the outdoor setting. The need for a change in pedagogy is based upon the aforementioned suggestions that there is a change in the context and this impacts upon the learners (and also the teachers). Therefore another dimension underpinning this study is the difference in culture between the classroom and the outdoor settings; this will be discussed in relation to the theoretical construct of 'border crossing' about which Aikenhead has written extensively. This will address both the social aspects of culture and border crossing in the context of the children as well as the teacher responses to the outdoor setting.

The following section, therefore, addresses key theoretical frameworks which support this study: elaborating the notion of Border Crossing and the teacher acting as a Cultural Broker as well as Bernstein's work on classification and framing.

2.3 Theoretical Frameworks

The use of Aikenhead's work on the notion of Border Crossing forms a substantive theoretical underpinning to the current study. His work is generally located within a secondary school science context and so the key principles and findings have been extended and applied in a different context to the transition of borders in the primary classroom when moving into the outdoor setting. This is explored further in this chapter. But there are other studies which focus on the border crossing which were

excluded from this study. Akkerman and Bakker's (2011) definition of what constitutes a boundary to be crossed appears initially to be similar to Aikenhead's. However, they apply this to the context of different stakeholders' perspectives of a particular situation and setting such as trainee teacher, a school supervisor and their mentor and how they might view shared experiences or positions differently. They also closely link boundary objects with this term. These are described as "artefacts doing the crossing by fulfilling a bridging function" (Akkerman and Bakker 2011, p133). They offer the example of a portfolio of work or medical patients' records which are able to transit the borders to be accessed by different people. This focus of my study does not draw upon the idea of there being objects which hold some meaning to different people, in different settings or from different perspectives. Rather, the focus on the teachers' teaching in the outdoor setting compared to the classroom has the aim of identifying differences rather than looking for some consensus between the settings. For this reason, Akkerman and Bakker's work was not used to support the development of my study. Similarly, Tilly (2004) writes extensively of social boundaries and whilst there are some aspects of his study that can be applied to this work the context is deeply rooted in the social dynamics of society. His work is less applicable when applied to the boundary between the classroom and outdoor setting in this study. Aikenhead's work, although extended from its original position and intention, serves to best explain the borders and transitions within this current study. The following section outlines the use of the term border crossing and what it means in the context of this work.

I am somewhat reluctant to subscribe to a definition *per se* of terms such as culture and Border Crossing as this invites discussion of meanings of words within the

definition and the minutiae of detail potentially clouding the bigger picture being deliberated. For the purposes of this study, however, it is essential to achieve some clarity of such key terms and what they mean in this context. An underpinning theme for this section is that of Border Crossing between different environments and experiences. It tentatively draws upon the notion of differences between the classroom and outdoor setting environments as different cultures to support the boundaries between inside and outside the classroom and suggests that differences in such cultures also act as barriers to be crossed. Some consideration is also given to the interplay in terms of power and relationships within different cultures and to what extent these further strengthen the border between one environment and the other although this is not a major focus of the work.

Bernstein's work (Bernstein and Solomon 1999, p273) describes the existence of a boundary and offers one definition as "a tension point which condenses the past yet opens the possibilities of futures," an idea which encompasses the experiences individuals bring and the potential for new experiences ahead of them. Border Crossing in this study adopts the meaning of the transition from one setting to another – and as the chapter will unpack, this may vary significantly depending upon the past experiences of the individual making the journey. Much of the existing literature which tackles the ideas of culture and Border Crossing relates to teaching in science; this study suggests the principles and challenges are equally applicable to the borders between the classroom and outdoor setting. Although the main focus of this work is on teachers and their teaching there is a dearth of literature in relation to pedagogy and border crossing in this context. Consequently, the forthcoming sections will consider these notions in the context of the children's experience and

ultimately present an argument that they are equally applicable to the teacher and their own transitions from the classroom to the outdoor setting.

Tan (2011, p1) describes the difficulties faced by children in school entering the science classroom where their culture and beliefs are incongruent with the nature of science which she states is "acultural, ahistoric, stable, content focussed and strongly empirical". She writes of culture in the broadest sense and the challenges she examines are in relation to a dominant Western view of science being tackled by children from Asian backgrounds. She draws upon notions of Border Crossing from Aikenhead's early work (for example, 1996) which suggests that children need to cross borders from their own lived experiences to that of the culture of school (Aikenhead 1996). This study seeks to extend this argument to suggest that such borders exist as children move from a traditional learning environment such as the classroom to being taught in the outdoor setting. In addition to Aikenhead's work, this chapter will also draw upon theories including Framing and Realisation rules (from Bernstein 1981) in order to establish the extent of the impact of transitions between cultures on teaching, suggesting the need to review pedagogical approaches in light of the challenges children meet. The ultimate intention is to extrapolate these ideas to teaching in the outdoor setting, not to explore the impact of learning outside the classroom, but to identify key features of an effective pedagogy for teaching in the outdoor setting. The rest of the chapter aims to highlight the complex interplay that exists between the cultures, those located within them and the resultant communication between culture and individuals.

2.4 Culture and Border Crossing

It has been suggested that children face different levels of challenge in crossing the borders between cultures and the extent of this challenge is dependent upon their personal experiences and the distance between the cultures to be experienced. Exploring this concept, this work will also consider the ways in which such border crossing can be facilitated. The primary aim of this section is to introduce the notion of cultures within the context of this study using work that is associated with Aikenhead (see for example 1996, 2001, and 2011) and Costa (1995) although other literature will also be referred to. Aikenhead and Costa's works have theorised notions of Border Crossing in the context of the science classroom where they have undertaken a range of studies (predominantly in the United States of America and Canada). Their work also draws upon observations and empirical studies within secondary schools.

Phelan *et al.* (1991) illustrate children's transitions from one culture to another; the movement from home to school, family to peer group, into classrooms. Their longitudinal study involved 54 secondary school aged pupils from four different high schools. They state that "many adolescents are left to navigate transitions without direct assistance from persons in any of their contexts, most notably the school" (Phelan *et al.* 1991, p224). Costa (1995) relates the ease of these transitions to the congruence of the cultures – she describes transitions as virtually impossible when the cultures are discordant. Where there are smaller differences between cultures the term "manageable" (Aikenhead 1999; Phelan *et al.* 1991; Costa 1995) is applied and

"hazardous" is a term applied in these previous studies to describe when transitions "when the cultures are diverse" (Aikenhead 1999, p270). These terms describe cognitive rather than physical challenges when crossing borders. A child, for example, attending primary school for the first day that has already experienced an Early Years setting and time without a parent or carer will, most likely, find crossing the border into Reception an easier transition than the child who is away from home for the first time. Likewise the child that has more experience of playing and spending time in the outdoor setting will make greater sense of the environment when taken outside the classroom. Aikenhead (1999, p270) suggests that the "capacity to resolve conflicting beliefs between ... cultures are familiar human traits" however he does not dismiss the need for resolution of "cognitive conflicts arising from different cultural settings" (*ibid*, p271). Simply expressed, the unfamiliarity of a new culture can be characterised as being out of one's comfort zone. There may be some cognitive dissonance where there is conflict in the mind of what this culture means – how does the child new to an environment make sense of the furniture, classroom, teacher, overgrown plants, natural and uneven pathways etc?

Despite Phelan *et al.* suggesting that the school is unsupportive in bridging these transitions there is evidence to suggest that teachers and support assistants do facilitate the movement from one culture to another. Garland (2008, p141) writes of teaching assistants who, through use of common language and knowledge of social background, serve to "act as intermediary or interpreter for children who might find the culture of schooling an alien one and even the language of schooling a foreign one". A teacher who uses the outdoor setting more frequently will act as this facilitator with those children struggling with that transition. Smooth transitions

(high congruence) are undertaken and managed every day, for example by adults between home and work. Aikenhead describes this process of enculturation taking place where there is cognitive harmony between one culture and another. In those first visits to school (or a new job, home, driving for the first time, or the outdoor setting...) it is probable that the transitions experienced will not be smooth although are likely to fall into being "manageable", becoming "smooth" as the negotiation between cultures becomes more familiar. The extent to which the crossings are problematic will be personal and Costa (1995) would argue they are inextricably linked with the extent to which the cultures are discordant. Although her studies focussed specifically upon the border with school science it can arguably be extrapolated to any change of culture and, specifically in this current study, the movement from the classroom to the outdoor setting.

Owolabi and Olatunde (2008) undertook an interpretative-ethnographic study utilising Focus Group Discussions involving twenty science teachers and fifty eight pupils from a school in Nigeria. Their findings suggest that borders exist on a number of levels: the physical space, pedagogically, behavioural expectations, cognitively and sociologically, all of which the child is trying to manage and reconcile. In a study such as this current one it is not possible to give each of these due consideration and the interrelationships between them make for complex and dynamic outcomes. However, the part they play must be acknowledged to some extent. In order to make sense of facilitating transitions between cultures, Solomon (1992) describes that, without appropriate instruction and support, children will revert to thinking and behaving in the way that is most deeply rooted for them – in her study they "reverted to their life-world way of thought" (*ibid*, p12). It is not

unreasonable to assume that children (and adults) will resist difficult transitions and have a tendency to return to their comfort zone where harmony and consonance exist. Teachers' teaching in the outdoor setting will arguably therefore adopt the same approach and make use of the tried and tested strategies they are most confident with in the classroom setting. Aikenhead (2001) suggests that the teacher (or, as Garland's 2008 study suggests, the teaching assistant) is required to play a role in facilitating these transitions between cultures and this role changes depending upon the nature of the crossing to be made. For the small number of children who are identified as making smooth transitions between cultures, the teacher should act as "coaching apprentices" and help children to make further progress within this culture. As the "tour guide" the teacher supports children requiring some management of the transition through bridging "the differences between the social contexts of learning" in different settings (Aikenhead 2001, p186). Where the cultures are diverse it is suggested that the teacher adopts a "travel agent" role where they make sensitive connections "to the students' academic interests by constructing a bridge to [their own] culture" (Aikenhead 2001, p186) offering incentives to visit this new place. In terms of school as a whole, the teachers' roles can be considered to evolve as the children progress within the academic year and from one year to the next – initially the travel agent enticing the children to engage with a new space and culture whereby the end of Key Stage 2 the majority of children will smoothly transit to the classroom where the teacher coaches them to "support their self-esteem and nurture their interest" (Aikenhead 2001, p186). However for the teacher to facilitate this most effectively, arguably they must also consider the borders they themselves are transiting, their previous experience with the new setting and acknowledge potential discordance within their own sub-cultures.

van Eijck (2007, p610) suggests that the differences Aikenhead identifies between cultures are not natural but are rather imposed by the researcher adopting a structuralist stance and, as a result, "problematic dichotomies" are introduced between different cultures. Further criticisms of Aikenhead's work posit that the 'voices' expressed are not of those located within and transiting cultures but of the authors and that the view held is over-simplistic with an interpretation of the culture being static and lacking dynamism. van Eijck calls for there to be more authentic categories and metaphors when discussing cultures and their differences. Aikenhead (2011 pers. comm.) defends himself against this critique stating that he finds alternative positions "philosophically interesting, but they seem to have no predictive value to guide one in how to act as a teacher". Aikenhead and Ogawa (2007, p615) respond directly to van Eijck's comments and emphasise the focus of studies of different cultures and border crossing should not be dominated by "a contest for greatest authenticity" but instead consider what can be learned from different perspectives, metaphors, dichotomies and contexts.

2.5 Culture and Language

The notion of Border Crossing forms the beginnings of the theoretical underpinnings of this work. This section of the literature review will present the theoretical positions of Bernstein and, to a much lesser extent, Foucault (Power relationships) before considering the move to teaching in the outdoor setting. There is some discussion around Bernstein's Language Codes and although these are not directly applied within my study they set a useful context for the creation of recognition and

realisation rules which play a key role in the exploration and examination of pedagogy within the different settings considered in this study. The term language is applied more broadly than perhaps Bernstein intended and the language rules he refers to are extended to become wider behavioural and cultural rules rather than specifically language. This modified application of his work in a different context is novel as my review of the existing literature did not reveal use of Bernstein's work in the way it has been employed within this current study. This work offers an unusual approach as a means of making sense of the different pedagogies observed within this study.

Bernstein's work suggests that within groups of society language codes operate which result in a sense of belonging and togetherness within that group. He defines a code as "a regulative principle, tacitly acquired, which selects and integrates: a) relevant meanings (meanings) b) forms of their realization (realizations) c) evoking contexts (contexts)" (Bernstein 1981, p328). More specifically within the 'code' there are sub-groups – elaborate and restricted codes which Bernstein has linked to different social classes. Language codes and culture can therefore feasibly be linked and identified as a component of the cultural boundary that children need to cross when transiting between home and school. In the context of this study, a modified application and extension of the notion of language codes suggests they play a role in exacerbating any differences in cultures children experience and therefore contribute negatively to the border to be crossed. Conversely, if modified positively they can provide the bridge to support the transition.

Young (2002, p1) suggests that restricted codes do not refer to restricted vocabulary "just as an elaborated code does not refer to better, more eloquent language" and that in themselves they do not denote class in academic terms or socio-cultural and demographic terms. However it is the restricted code which is associated with 'working classes' where both restricted and elaborated codes are associated with the middle and upper classes due to them being more "geographically, socially and culturally mobile" (Atherton 2002, p1). Bernstein (1971, p135) states that "one code is not better than the other; each possess its own aesthetic, its own possibilities" although he also suggest that society potentially places different values on the coding systems. He reinforces this (1990, p119) suggesting "there is a social class-regulated unequal distribution of privileging principles of communication" and that power relations are established through the use of the elaborated codes perceived as superior to restricted codes. This is evident in the classroom where the teacher is the figure of authority, the one who directs and dictates (even if invisibly to the children) and is the individual with the power in the relationship.

Bernstein (1981) indicates that language codes regulate such relationships and that children will initially **recognise** differences between the cultures and contexts (recognition rules) and then **realise** the relationship in relation to the context (realisation rules). The recognition rules allow sense to be made of a new context – the child attending school for the first time will take longer to get to assimilate and accommodate these rules than the child experienced in Early Years education; those with greater experience of being outside and playing outside will have a smoother transition to being taught in the outdoor setting. When meanings have been constructed the children are then able to realise these meanings and respond to the

"message" (Bernstein 1981, p342) and so behave appropriately in the context or setting. Morais (2002, p560) reiterates this, stating

> Realisation rules are principles that contain two dimensions: selection of meanings, and respective textual production. In other words, to produce a legitimate text, the subject should be able to select the appropriate meanings and produce the text according to those meanings.

The "text" referred to should be interpreted in the widest sense – not limited to the written word. In fact, the principle of recognition and realisation rules can arguably be applied to any Border Crossing context offering a principle which theorises how sense is made of new cultures. It is this application of Bernstein's work to the different cultures between the classroom and the outdoor setting, the borders to be crossed between the two and the teachers and children making sense of these differences that offers a new perspective on teaching and learning in the outdoor setting and where this study, in part, offers a unique perspective.

In an interview with Bernstein, Solomon (Bernstein and Solomon 1999, p265) highlights fundamental flaws with the interpretation and application of Bernstein's theories of language codes stating they have "become the object of crude oversimplification and comprehension". Although his initial work seems to suggest that there is no social hierarchy implied between restricted and elaborate codes, Bernstein's reply somewhat contradicts this by saying "codes attempt to suppress contradictions, cleaves and dilemmas in the external order (classification) and set up psychic defences for intra-individual order through the insulation (boundaries) they produce" (Bernstein and Solomon 1999, p270).

Bernstein (1981, p327) suggests there are "inequalities in the distribution of power and in principles of control between social groups" and that language codes serve to position subjects within their social group. The "voice" Bernstein describes is the teacher's and as such the power resides with them – they control the "message" of the classroom. This power results in some regulation of the recognition rules and meaning that forms the classroom culture – "the code regulates the *what* and *how* of meanings: what meaning may legitimately be put together and *how* these meanings may legitimately be realized" (Bernstein 1981, p342). Part of a child's engagement with realising the culture of the classroom is through recognising the disciplinary nature, including expectations of all relevant stakeholders about 'being' in the environment. Harker and May (1993, p172) posit that Bernstein's rules are "rules of conduct, determining the conditions for order, character, and manner and delineating the space available for negotiation between the teacher and pupil".

Foucault's work emphasises power relations and suggests that power is exercised in society which manifests itself as an unseen oppression or control. He describes this as "not a triumphant power ... it is a modest, suspicious power, which functions as a calculated, but permanent economy" (Foucault 1977, p170). He argues that a school setting has all the characteristics of an instrument of discipline achieved through the set-up of the classroom, a "mechanism that coerces by means of observation" and hierarchical observation and surveillance. This suggests that the culture of the classroom is not only potentially quite different for a child than their home culture due to overt rules, language and discipline but there is also an undercurrent of power games at play. McKinley and Stewart (2009, p57) state that the theory of the teacher

acting as a culture broker does not take into account the power relations that exist within the classroom and that relations between "dominant and subordinate groups" are ignored. As well as offering further criticism of Aikenhead's work (and the underpinning theory of Border Crossing) their criticisms also supports Foucault's views that there are dominant, although not necessarily explicit, power relations within the classroom as well as Bourdieu's view of cultural capital where a dominant class is able to impose its definition of reality (and culture) upon other classes. The balance of power within the classroom and outdoor settings is considered within this study as a means for identifying the specific conditions of an effective outdoor setting pedagogy although it is only a relatively small part of the focus of this work.

Driver *et al.* (1994, p11) suggest that children entering the classroom "involves entering a new community of discourse, a new culture". The codes used by the teacher to enforce the "rules" make explicit the "new culture" as well as ensuring that children adopt "realised" behaviours. This creates a boundary between them and the children. There is an exercise of power, however implicit, and an expectation of conformity. Children who struggle most to transit into this new culture may not be able to access the new restricted codes of the classroom or have come from a home setting so discordant with that of school that the border crossing becomes, as Costa describes, "virtually impossible". Symeou (2007, p473) indicates there is a strong impact upon a child's development in school from "social, cultural and learning experiences, attitudes and aspirations of the child's home background" and that the social and cultural capital described by Bourdieu are differentially valued by schools – in favour of the middle classes. She describes the 'habitus' of children from

working class families as offering "very little purchase on matters pertaining to schooling" whereas children from higher social locations have a familiarity with school and therefore "these children's adjustments to school and academic achievement is thus facilitated" (Symeou 2007, p475). Those with greatest cultural congruence are at an advantage and as "schools require an elaborated code for success ... working class children are disadvantaged" (Sadovik 2001, p679). "Working class families are usually intimidated by the educational system and feel neither competent to criticise the school nor capable to help their children with homework and other school-like tasks" (Symeou 2007, p475); thus, the border remains in place for the children to cross.

This chapter has set a scene for the spectrum of transition from one culture to another, established how language and its use can play a part in that and demonstrated how children recognise and realise new rules and subsequent actions.

Consideration will now be given to the pedagogies at play within the classroom, returning to Bernstein and his notions of classification, framing, visible and invisible pedagogies and ultimately linking these to the differences between the classroom and outdoor setting. The key argument presented is that it is not solely children who encounter a border to cross when being taught beyond the classroom but also the teacher does; I suggest there is an argument for teachers needing to adopt strategies to make their own pedagogical border crossing a smooth transition as they move away from the classroom culture to the outdoor setting. The impact of Border Crossing will now be considered exploring the impact it has on the teaching that

takes place within the classroom. This begins to draw upon ideas which are central to this thesis and therefore offers some reflections on the theories discussed and how these may be applied to classroom and outdoor setting practice.

2.6 Teaching Across Boundaries

Pedagogy can simply be thought of as the ways of teaching – how something is taught. Singh (2002, p572) explores the notion Bernstein presents of the pedagogic device which is "the processes by which discipline-specific or domain-specific expert knowledge is converted or pedagogised to constitute school knowledge (classroom curricula, teacher-student talk, online learning)". This suggests that the pedagogical device is specific to the culture of what is being taught and how this is translated into practice. This can be extrapolated to consider therefore that what is being taught will be differentially accessed by children based upon their own experiences. Giroux (1991, p511) highlights the need for the existence of "border pedagogy" which is "intent on challenging existing boundaries of knowledge and creating new ones, border pedagogy offers the opportunity for students to engage the multiple references that constitute different cultural codes, experiences and languages". The teacher therefore is not simply asked to act as a culture broker for boundaries that exist between culture in terms of behaviour, power and rules as already mentioned but also in relation to knowledge and learning within the classroom. Tan (2011) suggests that reconciliation of such differences, and as such a smooth transition of a border, can only be achieved when teachers are aware and cognisant of the factors that influence classroom and home cultures. I would argue

this should be of their own and those of the children. Another term that is applied and relevant is that of 'comparative pedagogy' which Alexander (2001, p513) defines as taking into account similarities and differences in teaching in terms of "concept, discourse and practice" as well as "teasing out that universal in pedagogy from what is unique or site/culture specific". The next section of this chapter discusses how different pedagogies, their relationship with culture and Border Crossing can be facilitated through widening the teacher's repertoire of pedagogical approaches.

Giroux (1991, p511) advocates that teachers need "to create pedagogical conditions in which students become border-crossers ... [and] allow students to write, speak, and listen in a language in which meaning becomes multi-accentual, dispersed and resists permanent discourse". It is possible that this notion creates conflict in the mind of the classroom teacher who aims for consistency and status quo within their environment. I suggest that in order to maintain a classroom environment with a fluid discourse and create such opportunities for children, a significant shift in pedagogical content knowledge (PCK) will need to take place. What might a classroom that facilitates Border Crossing look like? Bernstein writes of classification and framing and inextricably links these concepts to visible and invisible pedagogies. Classification – the insulation of pockets of knowledge or maintenance of boundaries between areas of learning – can be strong or weak. "A curriculum that is highly differentiated and separated" defines strong classification where weak classification is described as "a curriculum that is integrated and in which the boundaries between subjects are fragile" (Sadovik 2001, p688). Framing,

Bernstein defines as the communicative practices which are undertaken within the classroom. Again this can be strong or weak, characterised by the extent of the control exercised by the teacher in the classroom. Strong framing manifests itself with limited options of interaction between teacher and child whereas weak framing exhibits freedom and flexibility with what it being taught (Bernstein 1981). A traditional classroom setting may be depicted as having strong framing and strong classification and closely associated with this is the notion of visible pedagogy. To the learner (or 'acquirer' in Bernstein's terms) explicit criteria and rules would be prevalent and there is a clear hierarchy; the power is firmly located with the teacher. It is probable that the modern day classroom (and certainly teaching in non-traditional settings) demands weaker classification and framing where rules and criteria are implicit. The invisible pedagogies are demonstrative of far less overt discipline, structure and control. What do these variations mean for the children entering the classroom and what does this mean for pedagogical devices utilised in and out of the classroom? Although transitionally discussed together, classification and framing do not hold equal importance in this study. There is little focus on the curriculum being taught and the teachers' management of this so framing is more relevant to my work. For this reason, perhaps unusually, I have chosen to focus on framing as a key concept within the discussion of this study and so classification has been marginalised.

The school grounds, a residential centre or museum, can serve as meaningful stimuli for encouraging learning. Waite (2011, p5) suggests that when teaching outside the classroom there needs to be a balance between challenge and security and that this

relates to "social relations and understanding which transcend time and space". The outdoor setting offers a new culture to be crossed and all the factors that played a role in the border crossings between home and school are still relevant and pertain. Dunne (2010, p155) suggests that although Culture Brokerage and PCK are generally addressed individually within literature "as far as outdoor education is concerned both are inextricably linked". This study extends this to suggest that there is a relationship between managing Border Crossing, adopting appropriate pedagogical approaches and establishing an in- or outside-classroom culture which is characterised by a shift in framing. Morais (2002, p560) suggests weak framing and classification are "essential for learning ... hierarchical rules, for knowledge relations ... and for relations between spaces". This learning environment allows children to ask questions to challenge ideas, to direct their own learning and acquisition of knowledge. It may also present a culture that is different from the classroom and one that requires support when entering. Such approaches have limitations – Morais states that evaluation and analysis are difficult to achieve under these circumstances.

Teaching in the outdoor setting immediately removes much of the certainty than can be achieved within the traditional classroom setting, something that is potentially unnerving for both children and teachers. At the same time, that which causes the instability is also the stimulus for allowing children to direct their own learning, be spontaneous and to embrace emergent learning (a philosophy strongly supported in Early Years education and increasingly prevalent within KS1 and KS2). How do teachers, however, engage with extending their PCK to be able to support teaching and learning in these new cultures? Aikenhead (2001, p8) writes that teaching which

"ignores cultural alienation and does not acknowledge cultural differences" is not good quality teaching and Dunne (2010, p154) suggests "there is little done to tackle the specific pedagogical needs of working outside" and that highly influential aspects for improving effectiveness of out-of-classroom experiences are "culture brokerage and Pedagogical Content Knowledge". It is not unreasonable that a teacher therefore applies a classroom-dominated pedagogy to new cultures they find themselves teaching in. In order to best support children in their transition from school to outside the classroom teachers need to be aware of the borders to be crossed. For effective teaching to take place then it is important that the teachers themselves consider the cultural borders they have to cross pedagogically, psychologically and intellectually. Tan (2011) writes of the teacher, acting as the culture broker, being faced with the challenge of facilitating the children's engagements with Bernstein's recognition and realisation rules, managing these in relation to a dynamic learning setting and differentiating between those who have made a smooth transition to the outdoor setting as opposed to those who have greater discordance with the new culture.

Watters and Diezmann (1998) state that the teacher's responsibility is supporting the child in becoming a learner. I argue that a key part of the children becoming learners is the teacher supporting them making sense of the cultural changes and borders to be crossed. The theory of constructivist learning draws upon the notion of individuals having personal experience (home culture), intersubjective realities (dominant culture/cultural capital) and the extension from one experience to another quite new one (Border Crossing). Watters and Diezmann (1998, p73) highlight two

aspects which are important in developing constructivist pedagogy – the first is that teachers "require convincing evidence that the changes are beneficial and worth the effort" and secondly they are "willing to negotiate content ... and to encourage children to initiate activities" (*ibid*, p82). Using an outdoor setting invites opportunities for discussions and learning and through adoption of strong framing and strong classification, visible pedagogies and a controlled approach these opportunities will be closed.

This chapter has explored the key underpinning theories and concepts relevant to this study. A constant and underlying thread to the study and one that supports my methodological position is that of constructivism. Duffy and Cunningham (2012, p2) suggest that the term constructivism has "come to serve as an umbrella terms for a wide diversity of views" however they do identify characteristics of theories which claim to be constructivist in nature. They state "learning is an active process of constructing rather than acquiring knowledge" (*ibid*, p2) and I suggest this is equally applicable to the research process within this current study which recognised the role of the participant and the researcher in the development of the data which emerged. The growth of the term constructivism stems from the initial works of Piaget (1954) who developed learning theory suggesting children's autonomous experiences were key to their cognitive development. In addition to his ideas parallel work was being developed by Vygotsky who "emphasised the social and cultural influences on students … he argued that learning is a social and collaborative activity where people create meaning through their interactions with one another" (Schreiber and Valle 2013, p396). The interactions between teachers and children and the social dynamics of working within the classroom and in the outdoor setting form a key

component of this work; Vygotsky's social learning theory is also used significantly to explain the findings. His work supports the application and utilisation of concepts from the other theories which offer explanations of the characteristics described for an effective outdoor pedagogy. Two key aspects of Vygotsky's work which this study draws upon are those of the Zone of Proximal Development (ZPD) and the More Knowledgeable Other (MKO). Reynoso *et al.* (2012, p606) describe the ZPD as "the distance between a student's ability to perform a task under adult guidance and / or with peer collaboration and the student's ability solving problem independently". They also describe the impact of working with someone who has greater expertise in a given area on the learning that can take place:

> An encounter between the learner and others more capable (commonly known as MKO -More Knowledgeable Other-) is done within that zone, allowing the subject to learn through support. The MKO refers to anyone who has a better understanding or a higher ability than the learner, with respect to a particular task, process, or concept. (Reynoso *et al.* 2012, p606)

The notion of scaffolding learning (Bruner 1981) through additional adult or peer support within the classroom is not uncommon in the primary phase classroom. This study however extends this concept to consider its value and role in developing the teachers' pedagogy and promoting effective teaching in the outdoor setting.

2.7 Summary

As well as introducing existing literature relevant to my study this chapter has also outlined where modifications to established theories have been made as a result of limited literature directly on the notion of teachers' pedagogy in the outdoor setting. Specifically, the extension of Aikenhead's Border Crossing work to the outdoor setting rather than home and the science classroom and the concept of borders being equally applicable to teachers as well as children, Bernstein's language codes and associated theories have been adopted and adapted to include the widest sense of communication within different contexts and, although only briefly mentioned at this stage, the application of ZPD and MKO in a teachers' context rather than the child as a learner. Referring to these well-established ideas offers credible support to this study and through their adaptation this study also develops theory to enable a framework of effective pedagogy in the outdoor setting to evolve.

Chapter 3

Methodology and Research Design

This chapter outlines the study's design, justifying the methods employed and considers how the data was managed and analysed. It opens with a short introduction of the location of the study in terms of context of existing studies and their methodological positions. This builds, in part, upon the section in the Introduction chapter setting out my position as a researcher. The methods used within the study are discussed as well as who the participants were, how they came to be involved in the study and the nature of the Participant-Researcher relationship and some challenges associated with this. The approach to managing the data and its analysis, alongside discussion of the use of NVivo as a means of supporting this, is presented before the notion of academic rigour is examined. The chapter concludes by addressing the ethical issues associated with this study and a short summary.

3.1 Introduction

Traditionally studies with a focus on learning outside the classroom have been closely associated with science and, to a lesser extent, geography. The Field Studies Council aimed to raise the profile of using fieldwork to support science teaching which began in 2005 and the Association for Science Education journal School Science Review dedicated one volume to the theme of Outdoor Science in 2006. A number of further studies and papers discuss issues around the decline in the amount of working outside the classroom taking place in science and have done so over a significant period of time (Lock, 1998; Harris 1999; Fisher, 2001, Barker *et al.* 2002,

Dillon *et al.* 2003; Rickinson, 2004; Tilling, 2005; Reiss, 2006; FSC and ASE, 2007). Rickinson (2001) claimed much existing research, in a science context, was therefore steeped in positivist traditions and so reported findings in mathematical terms rather than making use of qualitative approaches. Conclusions were generated through application predominantly of quantitative methods and many of the perspectives presented through such research focussed on the children as participants, evaluated in terms of effect size, often communicated through meta-analysis papers (see for example Hattie *et al.* 1997). My study however focusses upon the actions of the teachers and explores their perceptions of pedagogy and practice and so is more qualitative in nature. The selected methods to achieve this involved the evolution of a theoretical framework which reflected effective pedagogy for teaching in the outdoor setting, underpinned by the methodological position I hold as a researcher discussed in the introduction.

3.2 Research Methods

This section outlines the case study approach that was used in this study and how the pilot study supported the evolution of the data collection tools. The data collection aimed to explore teachers' perceptions of outdoor learning and its pedagogy and so the qualitative methods outlined below were adopted to support this. The identification of the schools and individual participants is discussed as well as the tensions between trying to maintain a good working relationship with school staff while remaining sufficiently removed to avoid becoming a participant researcher as far as was possible.

3.2.1 A Case Study Approach

Atkins and Wallace (2012, p108) identify case studies as a means for capturing or interrogating "the real world – be that a situation, an organisation or a set of relationships – in all its complexity" through "conducting a small-scale investigation in order to explore a research question or theory". As this study's research questions were created upon the assumption that a difference exists between the pedagogy of teaching effectively inside the classroom and outside the classroom, a case study approach was deemed most appropriate. Although Atkins and Wallace (2012, p110) indicate that a common pitfall of the case study is "the danger of generalising from the particular", Silverman (2011, p386) suggests that generalisability is achievable through, amongst other approaches, "comparative inference". This allows identification of case studies based upon certain characteristics in order to "capture the heterogeneity of a population" and could be used "to make generalisations similar to statistical inferences" (*ibid*, p386). Silverman's assertions are bold and whilst the intended outcome of my research is the formation of a model for teaching in the outdoor setting, applicable to many school settings, the findings from the study and the claims I make cannot be generalised or likened to statistical studies.

Hamilton and Corbett-Whittier (2013, p62) summarise a case study approach as requiring

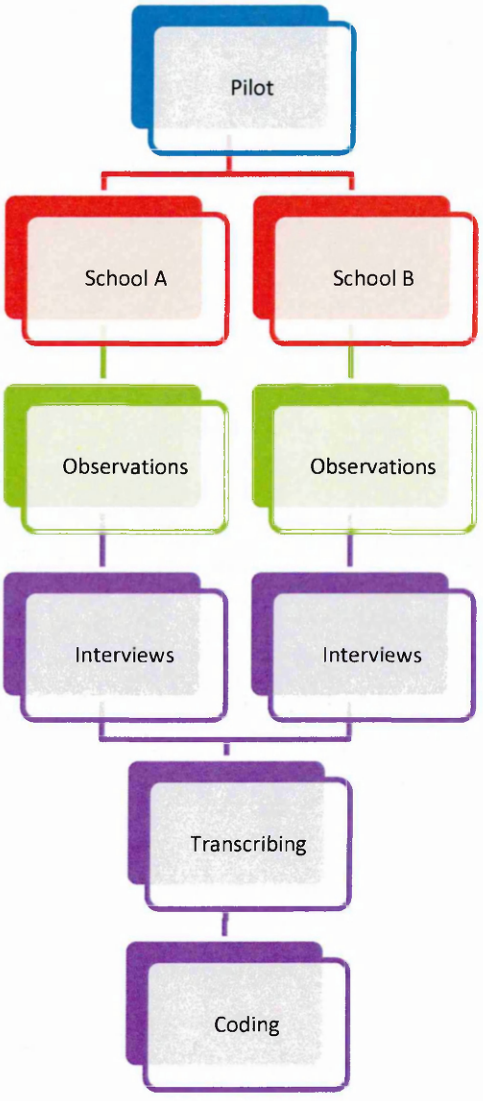
> A clarity of process and record, a capture of the richness of the voices of participants and yet some modesty when it comes to the claims which can be made – don't make grand assertions and don't rush to conclusion. Nonetheless, acknowledge that this kind of research can provide rich and significant insights and that identifying problems and tensions can be as valuable as finding "answers"

The view Hamilton and Corbett-Whittier present is perhaps more realistic in reflecting the aims of this study and indicate what a small case study of this nature is capable of achieving. This study generated a theoretical framework that could be trialled in other school settings so whilst not claiming generalizability this work does add to existing knowledge and understanding of teaching in the outdoor setting.

The approach for the presentation of findings is discussed later in this chapter and although it moves away from a direct comparative account between the schools, it is still appropriate to have undertaken the data collection in this way in order to facilitate the observations and analysis of differences and similarities in pedagogy.

Robson (2011, p70) describes research design as being "concerned with turning research questions into projects" and suggests with any research constructed around a flexible design that "the detailed framework of the design *emerges* during the study" (*ibid,* p72). The following section of this chapter will consider the role of the pilot study in starting the emergent process Robson describes as well as evaluating the individual research methods which coalesced to form the foundation of a new pedagogical framework.

Figure 2 represents the process of data collection throughout this study. Each step of the process is explored in more detail subsequently.



Trialled interview and observation schedules. Informed, structured and supported validity of the methods as a means for capturing relevant data.

Established extreme case studies Eisenhardt (1989) with school A making extensive use of the outdoor setting and School B far less so

Explored characteristics of pedagogy outside the classroom (RQ1). Followed a schedule and supported with accompanying notes. Took place inside and outside the classroom in School A and B.

Explored perceptions held by teachers in relation to teaching in the outdoor setting (RQ2). Followed a schedule - semi-structured in design. Digitally recorded.

Interviews transcribed and uploaded to NVivo. Observation data for analysis. Completed observation schedules and accompanying notes uploaded to NVivo.

Inductive approach using Nvivo to support management of data. **Stage 1**: Iterative, thematic coding. **Stage 2:** comparison against interviews schedule for gaps

Figure 2 Outline of the methods and process of data collection

3.2.2 Pilot

Robson indicates there are some aspects of case study research which can make piloting "difficult to set up" (*ibid*, p141). He suggested that the benefit of undertaking a case study was the flexibility to "learn on the job" (*ibid*, p141) making the nature of data collection and the initial research design dynamic in character. So whilst I felt it was beneficial to establish how feasible the observation and interviews schedules were to work with, I was also aware of the need to respond to the emerging data through my observations and the teachers' responses. As a result I was not resistant to methods evolving as the data collection progressed however I recognised that with there being a restricted data collection period this would still be limited. This further supported the use of the pilot study in advance of the main data collection period which informed the development process. The pilot study took place in a city-based primary school with lesson observations undertaken in both KS1 and KS2 settings. The purpose of piloting the observation schedule was to evaluate and develop the schedule used to capture the teacher's pedagogical approaches within the class. Some changes were made to the schedule – such as having more room to write accompanying notes, structuring the layout of the covering recording sheet on a single side so it was easier to toggle between the pages although overall data collection using this tool proved to be straightforward and workable.

The interview schedule was similarly piloted and, as with the observation schedule, worked well to enable a flow of conversation as well as a sufficiently detailed *aide memoire* to cover all the areas I aimed to discuss and explore. Atkins and Wallace

(2012, p90) advocated the use of piloting indicating that it can be multifunctional, stating "we can still use the data it produces, but in addition it will help us spot our mistakes and to review and improve our technique for the interviews which follow". The data from the pilot study was not included in the finding of this current study and so the piloting served predominantly as a means for trialling the research tool. In addition to the practical aspects of using the tools for observations and interviews, undertaking the pilot study also helped improve my own confidence in using these methods successfully. Akerlind (2008, p245) describes this as:

> leading to an internal sense of confidence and competence as a researcher, that is, a sense that you know what you're doing and that you are on the right track. This kind of development might involve acquiring the skills required to do research successfully.

Having established that the mechanics of the observations and interviews were workable and capable of yielding data related to answering the research questions, this chapter will now consider the participants selected for the main data collection in terms of the schools involved and the individuals within each school.

3.2.3 Research Participants

Identifying schools

The schools involved in the study were selected based upon two specific and purposeful criteria: the extent to which learning outside the classroom featured in the daily teaching of the school and secondly a willingness to participate at both Senior Leadership Team (SLT) and individual teacher level. The support from SLT was important as I would be spending a significant amount of time in each school and

with individual teachers. A positive attitude towards my work and presence from the SLT seemed key to encouraging a similar attitude from the individual teachers involved. In addition, securing permission from the SLT followed professional, ethical and courtesy protocols. Although a number of schools I approached which met the selection criteria expressed an interest in participating, other pressures such as pending Ofsted inspections or changes of staff resulted in some reluctant withdrawals. This resulted in a much smaller pool of schools to work with however I am confident that the purposive identification of schools meeting the criteria acted as, at least some, mitigation for the type of sample in that the schools involved were initially selected against specific criteria relating to their use of the outdoor setting. Silverman (2011, p389) indicates "theoretical and purposive sampling are often treated synonymously" and has features to which this study conformed: choosing cases in terms of the relevant theory and choosing deviant cases. The purpose of identifying two schools with different approaches to teaching in an outdoor setting was to establish extreme case studies to support theory development. The selection of these schools was integral to establishing the "polar types" Eisenhardt (1989, p537) describes as being essential for extending emergent theory; she supported her view that theoretical sampling to this end is preferable to random sampling. The sample, therefore, supported the purpose of this study. This chapter section will now describe the deviant cases or polar types the participating schools characterised.

Both schools were deemed to be outstanding by Ofsted (inspections 2011 and 2012 respectively). They had a number of similarities which are described below; however, there were key differences in terms of the approach to teaching in the outdoor setting.

School A

The first school involved in the study was committed to developing teaching in an outdoor setting and had actively engaged in an ongoing series of CPD events which aimed to support development of the teachers' use of this. This school was located in Manchester; a two-form entry school with a total number on roll (NOR) of 480 children. It had a range of grounds for children's use both in break times and lessons. The school had invested heavily in developing an orchard area, a courtyard, outdoor amphitheatre, seated sheltered areas and wildlife garden. An Outdoor Learning Co-ordinator (OLC) had been appointed; she started the academic year delivering In Service Training (INSET) to support staff using the outdoor spaces effectively. Prior to the appointment of the OLC the SLT had invited an external expert in the field of outdoor learning to lead a whole-school session entitled "Working Outside the Classroom: the influence of schooling pedagogy". The OLC reported to Governors on school-based activities outside the classroom termly and monitored the use of the grounds, supporting staff as required. Within my study this school acted as the extreme or deviant case as this level of engagement with and investment in learning outside the classroom is unusual. This school is referred to as School A throughout the study.

School B

The second school, referred to as School B, was located in Yorkshire, had a similar NOR (497) to School A and was also two form entry. Although the grounds were similar in size they were not used in the same way as School A; areas were not

defined and created for the purpose of learning outside. The move towards teaching in the outdoor setting was less well established and the teachers made use of this space on a more *ad hoc* arrangement. My experience of working with teachers and schools suggested that this was a more typical approach to the outdoor setting in primary schools although this was not based upon systematic data collection. There were no members of staff specifically tasked with promoting or supporting teaching and learning in the outdoor setting. This school is referred to as School B in this study.

It was anticipated that immersion in these two different settings would yield rich and comparative data which Mertens (2010, p259) describes as "extensive and careful description of the time, place, context and culture" which enables readers to make "judgements about the applicability of the research findings to their own situations". The profiles of these schools very much supported the aims of my study which overcame the initial challenge of identifying settings to work with. The second challenge within this context was engaging the individual teachers in each of the schools and maintaining a working relationship with them.

3.2.4 Participant-Researcher Relationship

The position King (1993, p121) appositely describes is akin to the one I developed after a few weeks in each of the participant schools as "I felt I was considered by most to be fairly benign and certainly no threat". Reaching this point was not straightforward and there were some challenges to be overcome in both schools. In School A there were very few difficulties with individual staff; after being observed,

one teacher was unwilling to participate in an interview. Although I hoped for an interview for some time after the initial observation she was always too busy and could not find the time to talk with me. She did not withdraw her observation from the study but neither did she participate further.

School B, however, presented some of the foreseeable challenges with teachers being observed as part of a research process. Although prior to starting the data collection I spent time in both schools so the staff involved could become familiar with me and were accustomed to me being in the class, the Yorkshire school staff were aware of my role within ITE and at the end of observations would ask my opinions on their teaching. Although their teaching was key to the study I was observing them in a more exploratory way rather than reviewing their practice as I would in my role as in ITE tutor and so remained focussed on the central aspects of the observation schedule. It seemed as though the teachers developed a sense of being observed in a formal inspection-type capacity rather than a research one and perhaps they perceived this in a threatening way despite reassurance. It became increasingly difficult to arrange time with them in school – in part, due to timetables and additional curricular events but also I perceived a sense of reluctance from these individuals to support my observations and research. I made a difficult decision not to pursue them for involvement and through discussion with the Headteacher rescheduled observations and interviews to take place in the new academic year with new staff to whom I was unknown. Again the observation data from these teachers was retained as they did not ask for it to be withdrawn from the study. Hamilton and Corbett-Whittier (2013, p69) highlights that accessing school and participants was often an easy step although "not everyone will be as open and supportive as you

hope" and suggests that, in part, this may be due to participants being "afraid of the possible results of your research". Although I firmly believed that there were minimal or no potentially negative consequences of this research I appreciated that there was the potential for such perceptions and felt that this was certainly true of the individual in School A and the first set of participants in School B.

There are many terms used in the research process to describe the level of involvement the researcher has with the participants. The terms lie on a spectrum from immersion in a deep ethnographic study to the complete passivity and absence of any interaction with the participants during observations. Initially when developing ideas around data collection I intended to adopt a non-participation approach although felt this term leaned too far towards "the notion of unobtrusive, objective observation" (Angrosino and Rosenberg 2011, p467) and whilst no interactions with the teacher or children was perhaps the ideal situation, simply being in the classroom would likely have some effect and the undertaking of the pilot demonstrated that an unknown person in the classroom was a source of discussion and interest amongst the children, a number of whom approached me to investigate why I was there. For this reason something closer to a passive participant approach seemed to describe more accurately my place in the classroom throughout observations which attempted to minimise interactions. However this again exaggerated my position as a researcher. I have already identified I established a courteous working relationship with the teachers in both schools. I did not seek out dialogue with the children or the teachers during observations although sometimes they would approach me. My consistent response to this was to curtail any conversations they instigated as quickly and politely as possible. For these reasons I

cannot describe my role as entirely passive although neither was I a fully participant observer. Trying to establish a completely passive role could be seen as contradictory to the underpinning position that this study took; a social-constructivist approach which highlighted interactions. Minimising the impact of such interactions, however insignificant, was a key challenge for me as a researcher and was consistent with Peshkin's (1998) discussions around researchers continually reflecting upon and challenging their involvement and influence on their studies. Robson (2011, p317) states there are challenges with whichever approach taken as "virtually total detachment can come across as antisocial and itself cause a reaction from those observed. To be highly involved risks compromising your researcher role".

Bell (1969) was cited by King (1993, p122) as defining participant observation as something that "varies from total participation with no observation, to observation with no participation" suggesting that not only is there a spectrum of researcher involvement but also within each of the terms used to label each position on the spectrum. Rather than being too concerned with the labelling of how I conducted the observations I think it is important to state that the same approach was adopted with each observation; interactions with teachers and children were kept to a minimum throughout observations however in the interests of maintaining access to the classes and schools a polite but minimal social relationship was formed with the staff.

3.2.5 Identifying School Participants

The Headteachers of both schools initially expressed interest in participating in my study and approached their staff to identify teachers who would be willing to participate. In School A the OLC acted as a facilitator with staff and coordinated dialogue between the teachers and myself, organising initial observations and time to meet with staff. Not being known in any other capacity to the staff in this school it was useful to identify myself as a student researcher which helped encourage a positive environment for the data collection. Generally staff did not seem to feel any sense of concern or hidden agenda regarding my presence. In School B with the new staff to whom I was unknown the relationship very quickly became more open than with the previous participants and comparable with the staff of School A. After the Headteacher initiated the first meeting with the participants I then liaised directly with them to organise the observations and interviews.

Having addressed the development of the data collection tools and how the participating sample evolved to those fully engaged with the study, this chapter will now consider the methods adopted, justify their use and identify their limitations.

3.2.6 Observations and Field Notes

Robson (2011, p316) suggests "a major advantage of observation as a technique is its directness" and that it works well to complement other means of data collection. Robson (2011, p318) also states "the driving force behind the use of observation is the research question or questions, even though these may be very broad, general and

loosely phrased" which meant in this study a focus for the observation was the teacher's actions and interactions when teaching inside and outside the classroom. The aim of this was to determine the extent to which classroom pedagogy dominated teaching in an outdoor setting and identify distinctive characteristics of teaching in different educational settings. Silverman (2011, p42) describes the observation process as "fundamental to qualitative research" and as crucial for developing understanding of the participants' behaviours. The observation schedule (see Appendix 1) used to support this understanding took two forms: a structured observation schedule with predefined actions and interactions to be observed within the lesson, recorded at 5 minute intervals, and a semi-structured section with broader headings to record a chronological commentary throughout the lesson between recording intervals. The latter formed part of the field notes compiled throughout the study. These can be defined as

> a key form of data collection ... [and] are more than a research diary; they provide an opportunity to record, as you go along, observations and impressions which are relevant to your study (Atkins and Wallace 2012, p155)

Cohen *et al.* (2005, p313) outline that comprehensive observations should include

> notes made *in situ*; expanded notes that are made after initial observations; journal notes to record issues, ideas, difficulties etc. that arise during the field-work; a developing, tentative running record of on-going analysis and interpretation

My observation schedule was therefore supported by field notes covering these areas.

The observation schedule was constructed from existing literature identifying what a teacher's pedagogy might 'look like' and establishing aspects of it that are observable. Silverman (2011, p38) states that "the facts we find in 'the field' never

speak for themselves but are impregnated by our assumptions"; he continues, that these "assumptions are usually given the fancy term 'theories". As the observation schedule evolved, where observable features linked with Bernstein's theory of classification and framing, this was made explicit on a mind-map representing the construction (a copy of the mindmap can be seen in Appendix 2). As I have stated this study presupposed differences in pedagogical approaches teaching inside and outside the classroom and so I do not make claims of objectivity; my study was embedded in the context of Bernstein's work but I created a schedule which sought "to minimise the influence of the observer's judgement, [as] the interpretative researcher seeks to confirm the data and their interpretation are not figments of the researcher's imagination" (Guba and Lincoln 1989, cited in Mertens 2010, p389). Where possible the observations took place while science was being taught. Initially a focus on science was important since, as noted in the above section, science is steeped in a tradition of field work and teachers have many obvious opportunities to take their class into the outdoor setting. As the study developed it became apparent that more specifically the focus for the study was not as much on *what* was being taught rather *how* it was being taught and the subject area, therefore, was not such a central focus. Nevertheless, there was some consistency to observations taking place within the same subject as it did, certainly to an extent, allow for comparable subject specific pedagogy or behaviour of the teachers (and children).

In total, eight observations of five staff lasting between one and two hours were undertaken in School A. The majority of these involved some teaching within the classroom, moving to the outdoor setting and then returning to the classroom. In School B six hour-long observations were completed involving three staff. Three of

these lessons involved teaching inside and outside the classroom and three were solely in the classroom. The purpose of observing teaching both inside and outside the classroom was to give a comparison of individual teachers' teaching in the two settings. The observation schedules were completed by hand within each lesson. After the observations had taken place these were transcribed into an electronic form. This was to allow for data analysis using computer software, to be discussed later in this chapter.

The observations completed the first stage of data collection; the second phase involved interviews with the teachers observed and explored the extent to which my observations matched the perceptions teachers' held with respect to their own pedagogy and practice.

3.2.7 Interviewing

Atkins and Wallace (2012, p86) describe interviews as providing a flexible "opportunity for dialogue ... [and] allows the interviewer to probe and clarify and to check they have understood correctly what is being said". Hamilton and Corbett-Whittier (2013, p104) identify four key questions to be answered prior to choosing to interview:

- What is the nature of your research and how will interviews help to address the problem/issues you are exploring?
- Will interviews be used as follow up/in conjunction with other approaches?
- Who is to be interviewed and how?
- How are they to be interviewed and how will it be recorded?

The purpose of the interviews in this study was to explore teachers' perceptions and views of their own and teaching more generally in the outdoor setting. This method of data collection reflects my view that engaging in such meaningful dialogue was necessary for gaining any insights into the perceptions held by the participants. Freebody (2003) writes of the interview process as a means of building accounts from participants and the aim of this study was to achieve this. Denscombe (2002, p27) offers a more generic purpose of this method of obtaining data as "describing something" with the intention of exploring

> how things *are*, rather than how they will be, or how they should be, or even why they are as they are.

Silverman (2011, p164) suggests that the interview is collaborative (which corroborates the underpinning interpretivist/constructivist platform of my study) and describes the interviewer as an "active participant". He dismisses the notion of the interview simply as a conversation suggesting this was not sufficiently sophisticated to represent the complexities of an interview. These principles of the importance of using talk to elucidate perceptions were equally applicable to the less formal dialogue with teachers around school. Although I observed what was happening, the teachers' views were an integral component of constructing a more complete picture. In accordance with Hamilton and Corbett-Whittier's (2013) views, my use of interviews complemented the observations and allowed me to explore issues and themes which arose from the observations in greater depth. This helped to confirm, substantiate or challenge initial interpretations.

The interview schedule was similar to the observation schedule in terms of broad areas of coverage. Interviews took place after the initial observations were

undertaken; this enabled any emerging points and first findings from the analysis of observations to inform the interview questions. The interviews took a semi-structured form allowing a compromise between having predetermined questions to explore key areas yet maintaining the flexibility necessary for the evolution of ideas which Robson (2002) and Mertens (1998) identify as characteristic of this type of research. By using this format I was able to exercise "considerable freedom in the sequencing of questions, their exact wording, and in the amount of time and attention given to different topics" (Robson 2011, p285). Cohen *et al.* (2005) write of the nature of questions that formed the interview rather than the continuum of structured to unstructured. They describe an 'interview guide' approach which was characterised through predetermined topics and sequence of questions which allowed for a more comprehensive approach with the opportunity to address any gaps in the data. The teachers who were observed earlier in the data collection phase of my study were invited to participate in individual interviews. It was essential that the structure was fluid enough for open discussion around the area of outdoor teaching as it emerged but also addressed the predetermined areas for discussion identified on the interview schedule. The interviews therefore took the interview guide form described by Cohen *et al.* or the semi-structured nature according to Mertens and Robson.

The interview schedule was strongly influenced by Tomlinson's hierarchical approach which he suggests allows the researcher to have a "synoptical diagram portraying the overall domain of interest" (Tomlinson 1989, p163). This design encourages the researcher to identify their priorities for the interview. He states that

the interviewer requires a predetermined set of questions arranged hierarchically and a skeleton structure of these (this can be seen in Appendix 3).

The questions are then used to direct the interview as Tomlinson (1989, p165) describes:

> The interviewer starts from the more general end of the agenda hierarchy and elicits the elaboration of interviewee accounts. Insofar as this fails to produce coverage of the research agenda, the interviewer checks on the interviewee's exhaustiveness of the coverage under any given heading and, if necessary, then raises the next most specific sub-heading him/herself. This process is used iteratively through the various sub-levels' until the agenda is covered.

The questions in the interview schedule for this current study were organised such that they initially engaged the participant with descriptive accounts of their working life and history acting as a means of introducing their own backgrounds but also as a question they could answer with some confidence and ease before progressing to what could be described as more challenging questions about pedagogy and practice. Adopting this approach to the schedule design allowed the predetermined areas of the study to be covered whilst still allowing the flexibility for emerging ideas and topics through the interview.

Although Silverman is dismissive of the interview as a conversation he does concede that an interview may be conversational in tone; however he suggests that the interviewer almost always has a level of control. This was true of my study where the creation of the schedule directed the interview to cover the areas I wanted to discuss. The advantage of the researcher having control over the content for discussion was in being able to direct the focus of the dialogue but as Cohen *et al.*

(2005, p271) highlight "important and salient topics may be inadvertently missed". I tried to reduce the opportunity for missing such key points through transcribing the interviews soon after they had taken place which allowed me to return to participants if necessary in order to follow up points raised. Cohen *et al.* also indicate that such a flexible approach carries the danger of reducing comparability between interviews. The use of my predetermined schedule went some way to ensuring at least some common themes were discussed and prevented the situation Hamilton and Corbett-Whittier (2013, p105) describe where

> it can be difficult to remember that this is not a conversation and it can be all too easy to lose control over the shape of the interview when the participant goes off at a tangent.

The piloted interview schedule was adapted as previously described and used throughout the interviews in both schools. The schedule ensured there was coverage of all areas that had previously been identified as key to yielding data to support the research questions but also allowed for other topics to be discussed as they arose. This also meant there was some comparability between responses which addressed some of Cohen *et al.*'s concerns. A total of 13 interviews were conducted in the two schools. Nine took place in School A – six with classroom teachers, one with the OLC and two with members of SLT - and four took place in School B involving the three teachers observed and the Headteacher.

Every interview was recorded using a digital recorder, a strategy that Robson (2002, p290) advocates, stating "whenever feasible, interviews should be audio-taped ... the tape provides a permanent record and allows you to concentrate on the interview". Digitally recording the interviews offered a number of other advantages including allowing for careful review of the data, complete and partial transcriptions to be

made, ease of reference to what was said and the ability to check this with the participants. However, a number of disadvantages have been identified within the literature. Beyond concerns of technical failure there were issues around the lack of capturing paralinguistic communications which Atkins and Wallace (2011, p90) describe as providing "a more nuanced reading of the interviewee's discourse". Sanger (1996, p68) suggests

> it is only a partial record of the interaction and communication – the sound component – and even this partial record will be reduced if, as usually happens, subsequent use of the record is based on transcript-words only.

Where possible, in an attempt to capture what Silverman (2011) describes as the truth of the interview, notes were taken to accompany the interview recording. Body language and tone throughout the interview and the transcription of the recording were done as soon as possible after the interview. The purpose of transcription taking place as quickly as possible was to maintain familiarity with the interview responses and identify any immediate emerging themes or points for further discussion which could be further raised with the participants while I was still present in the schools.

Transcripts in themselves raise another concern – "an arduous and lengthy task, though often necessary if we are to get the most we can from our data" (Atkins and Wallace 2011, p86). Somekh and Lewin (2005, p141) support this viewpoint stating "transcribing is very time-consuming but yields excellent data" although Cohen *et al.* (2005, p282) warn of "the potential for a massive data loss, distortion and the reduction of complexity" through the transcription process. They are not suggesting that transcription is without value but suggest the researcher approach this with some honesty about what the transcript actually is; they should not "believe that they

tell everything that took place in the interview" . Cohen *et al.* (2005, pp281-282) state

> It is unrealistic to pretend that the data on transcripts is anything but *already interpreted* data ... [they] are decontexualised, abstracted from time and space, from the dynamics of the situation, from the live form and from the social, interactive, dynamic and fluid dimensions of their sources; they are frozen.

They advocate that the researcher considers their transcript for additional data such as inflections, tone, interruptions, hesitation and emphasis ... a challenge through the analysis process. The transcription process undoubtedly served as the first layer of data analysis as I added a column to the transcripts for notes as they were being completed. This meant key points or emerging themes were identified at a very early stage and so when the transcripts were used in later data analysis they had already been interpreted to some extent even if at a relatively superficial level. The arguments for, and benefits of, undertaking the transcription outweighed the challenges with it. Driver suggests that their greatest advantage is "providing a 'true' record of the original interview" (1997, p60) and Ruane (2005, p162) states that

> written verbatim transcripts are particularly important ... the respondent's exact answers constitute the data that the researcher will analyze ... there is no justification for skipping this step of preparation.

Despite the many concerns about the challenges of interviewing, Robson (2011, p281) states "the interview is in no sense a soft option as a data-gathering technique ... it has the potential of providing rich and highly illuminative material". In my study interviews have served to explore participants' perceptions and as a vehicle for discussion around teaching in the outdoor setting. The semi-structured nature and use

of an interview schedule were necessary for some parity throughout the research process and supports the inclusion of interviews as a data collection method. They acted as an appropriate vehicle for gaining some insight into the thoughts and perceptions of the teachers participating in the study and yielded data which was able to be analysed and discussed in the context of existing literature and underpinning theories.

Having discussed the methods used within my study, this chapter will examine how the data was managed, how the rigour and robustness of data were maintained and the process of analysis that was adopted.

3.3 Managing the Data

3.3.1 Qualitative Data Analysis

Robson (2002, p387) indicates that analysis is necessary as "generally speaking, data in their raw form do not speak for themselves. The messages stay hidden and need careful teasing out". I argue that the data rarely "speaks for itself" and that the voice heard is that of the researcher telling a story of others' views through interpretation of the data. It is essential, therefore, that researchers recognise their subjectivity in interpreting data— something I aimed to clarify in the introduction and reflected on throughout undertaking the research.

An inductive approach to data analysis was adopted; this "refers to the process of constructing theories from empirical data by searching for themes and seeking to

make meaning from the evidence" (Somekh and Lewin 2005, p346). There is a continuum from a deductive to inductive approach which Wilson (2013, p163) argues are "competing tensions". She states that

> on one hand qualitative researchers have an overarching idea of what it is they want to investigate in the data and some notion at least of the different areas in which this sought-after information can be grouped" whereas "the inductive approach ... takes an entirely open-minded approach to the data and uses themes which emerge from the data themselves as tools for the analysis. (*ibid*, p163)

She concludes that "in reality, educational researchers dealing with qualitative material usually employ a mixture of the two approaches" (*ibid*, p163). This was certainly true of this work and it was not possible, nor an intention, to deny there were assumptions which underpinned this study and had informed its design and data analysis. This did not mean however that the analysis was limited to only establishing predetermined relationships but "is determined by both research objectives (deductive) and multiple readings and interpretations of the raw data (inductive)" (Thomas, p240). Thomas (2006, p240) describes these as principles of the use of a general inductive approach.

Key principles upon which the design of this study was based were that there was an underpinning theory and a search for pedagogical differences in different settings as well as an openness and flexibility to manage unexpected emerging themes and ideas. The approach, therefore, to data analysis was twofold; firstly, to explore the data for new, emerging themes and secondly to look for the themes in the observation and interview schedules. As has been stated, the nature of this study aimed to yield rich data which Mertens (2010, p425) states requires reducing to "a manageable size that can then be used for reporting". I approached the data using a

coding process which Mertens (2010, p425) describes as "assigning a label to excerpts of data that conceptually 'hang together'" and could be used to show how data related to each other or identified key areas that were not to be lost through the data reduction process. Silverman (2011, p68) identifies the practicalities of coding

- You can highlight a work, line. Sentence or paragraph and then give it a label
- Your labels can range from the quite descriptive to the abstract and conceptual
- You can pick out single 'key words' that do nice summing up, or can select a few words, phrases or even sentences
- Those labels can emerge from using the specific words that people use as well as modifying, somewhat, those phrases.

Scheurich (1997) argues that coding data creates patterns and themes which do not necessarily exist and by presenting findings through such a means tells a story that is not there to be told. Charmaz (2006) supports the use of coding, however, as a means of creating an analytical frame from which analysis can be built. She suggests that coding "should stick closely to the data [and] try to see actions in each segment rather than applying pre-existing categories" (*ibid*, p47) followed by axial coding. Strauss and Corbin (1998, cited in Charmaz 2006, p60) describe axial coding as a process whereby the fractured codes are brought back together "in a coherent whole". Although often described as sequential actions the reality of undertaking this coding and process results in the processes being somewhat simultaneous as Corbin and Holt suggested.

The next section of this chapter outlines the coding analysis process that took place Firstly, it will consider the use of computer software to support the analysis process.

3.3.2 Using NVivo

There are differing opinions on the use of software in undertaking analyses of qualitative data. Bergin (2011, p6) highlights advantages such as "a single location for storage that provides easy access to material and the ability to handle large amounts of data with consistent coding schemes" and "the ability to help with theory building". The transcription of interviews and the word processing of observation schedules and field notes did, as predicted, result in my study producing a large amount of data; a means of organising this in order to identify and establish any patterns and themes was key. Bergin (2011, p7) suggests NVivo has the capacity to support analysis of qualitative data in five ways –

- Managing and organising data
- Managing ideas
- Querying data
- Graphically modelling the ideas and concepts being built from the data
- Reporting from the data

I recognised that using such a software programme by no means distanced the researcher from the data and did not replace the ways people learn from it but as Bazeley (2007) argues it serves to increase the effectiveness of learning. The use of NVivo was certainly not an easy option but did provide a "challenging but valuable means for advancing the robustness of qualitative research" (Bergin 2011, p12). The first stage of using NVivo was to upload all electronic copies of the interview transcripts, observation schedules and field notes. The next step was to identify patterns in responses – and indeed conflicting views - and code these in order to establish emerging themes. There is extensive literature in relation to the purpose

and role of coding when undertaking qualitative data analysis which will now be discussed.

Robson (2011, p474) states that coding has a central role in qualitative data analysis and indicates thematic coding was a generic approach that can be adopted. A code can be described as "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldaña 2013, p3). The use of NVivo supported the coding of data through the creation of nodes. These nodes represented an initial "open coding" (Robson 2011, p149) from the transcripts which allowed me to form initial categories or recurring themes. The second stage of coding was axial coding which "involves assembling the data in new ways after open coding" before the final "selective coding" took place through which "conditional *propositions* (or hypotheses) are typically presented" (Robson 2011, p149). In reality the stages of the process were not so sequential and as Robson states "they are likely to overlap" (*ibid*). The coding took place in the first instance through reading of the transcripts and identifying points that were of interest or repeated. The process was repeated several times to ensure that as new codes emerged earlier read transcripts were revisited to ensure points had not been missed. One of the benefits of having undertaken the transcription process was familiarity with the data which was essential for beginning to interpret it and also allowed any recurring themes to become evident and the coding process to begin.

Robson also suggests that thematic coding can be used inductively with codes and themes emerging from the data akin to a grounded theory approach as described in

the first stage of coding in this study. It also allowed for starting with predetermined codes or themes. This was the next step in the data analysis. Saldaña (2013, p11) describes coding as a process with many stages of revisiting the data in order for "codes and categories to become more refined and, depending on your methodological approach, more conceptual and abstract". When I felt these codes were saturated and were no longer being added to or developed, I referred back to the interview schedule and theoretical underpinnings that informed the construction of the schedule in order to identify if there were are any areas previously thought to be relevant that I had not identified in the initial coding. This resulted in revisiting the transcripts several times to ensure they were explored thoroughly for any salient points in relation to the predetermined areas.

To this point the use of NVivo had acted very much like a sophisticated cut and paste or highlighter tool. However, one of the further advantages of using such software is the ability to query word or phrase frequency within the data which allowed me "to explore any emergent but as yet undetected patterns" (Saldaña 2013, p63). This enabled me to do a final search through the electronic documents for key words relating to the emerging codes, themes and predetermined areas.

Once coding was complete the organisation of the codes could be arranged in a number of ways. Reports were generated by node (to show all the comments from a range of sources in relation to one code e.g. behaviour management), by source (to show which participant said what about each node) and visually as wordclouds generated by node, participant or from all sources (Appendix 4 contains a sample of a report generated by node). The wordclouds gave visual presentations of word

frequency and which themes were more often referred to than others. Another advantage of the use of NVivo was the highly visible coding framework that emerges in terms which can more easily challenged and shared with other researchers in a way that traditional, non-electronic data analysis methods may not. The reports and nodes organisation enabled the categories to be pooled and presented under two main headings – behaviour and teaching which are discussed in forthcoming chapters. – and ease of finding sources, participant quotations and general organisation of the extensive data.

Although the use of computer software supported the analysis process there were many issues about the use of NVivo including the "amount of time and effort taken to become proficient in using the program" (Bergin 2010, p6). There was little doubt that there were significant time implications for learning to use the software in a way that supports rather than inhibits the analysis process. Both Bergin (2011) and Robson (2011) suggest that researchers have greater reluctance to change codes and categories once established using software. When undertaking the analysis there was always a sense of wanting to reach the elusive finish line and it was a challenge to know when analysis should stop. Revisiting the data frequently throughout the process and trying to maintain openness to new themes resulted in the codes and themes changing several times throughout the process. Knowing of the possible risk of the reluctance to change coding has allowed me to reflect and decide the most suitable approaches. This demonstrates my recognition of the need to challenge my own ideas and preconceptions. Overall, I am confident that the benefits of the organisational tools and exploratory capacity of NVivo, alongside an awareness of the potential pitfalls, outweigh the disadvantages and supported the analysis process.

In summary the following process took place to analyse the data:

- Transcripts were made of interviews, observations and field notes
- The transcripts were uploaded to NVivo
- Transcripts were read alongside listening to the interview recording
- Initial notes were made where statements were found "interesting" or "jumped out"
- These were marked as nodes on NVivo
- Transcripts were read again alongside listening to the recording – annotations were made in the margin in relation to the themes that emerged (and also missed opportunities for elaborating upon ideas raised)
- As new nodes emerged from one transcript the others were re-read in order to challenge or support the existence of that theme within the data
- Transcripts were read again and compared with the predetermined categories of the interview schedule
- A summary of the themes was generated using NVivo by node and by participant

The analysed data is presented in the forthcoming Findings and Discussion chapters. I have already stated that this reported study will make use of comparative accounts between the participant schools. However, it is worth stating at this point that the findings will not be presented in terms of a description of one school followed by the other. The emerging themes are presented drawing out any similarities and differences between the schools and, where appropriate, the individual teachers before discussing them in relation to theoretical underpinnings and the literature. Before doing so, I will address the issue of academic rigour and then the ethical considerations made when designing and undertaking the study.

3.4 Rigour

Reliability is a term often referred to in the research process. It can be defined as "the stability or consistency with which we measure something" (Robson 2012, p85). Somekh and Lewin (2005, p348) additionally state that reliability is the term used to mean "the truth of the findings has been established". In this study the

measure or truth, if I am to use this language, was of teachers' perceptions and in many ways this term was more easily reconciled with quantitative data. Silverman (2012, p361) suggests

> some social scientists argue that a concern for the reliability of observations only arises within the quantitative research tradition

He did however argue that, to an extent, reliability is possible within qualitative studies and can be enhanced through the maintenance of notes made at the time, expanded notes after each field session, a journal which records emerging issues and a provisional running record of analysis and interpretation. These were kept with some diligence during my study. However, the observations took place at a particular moment in time with a particular class on a certain day; the interviews were similarly unique as the discussion was influenced by the observations. In this sense being able to recreate the outcomes of the observations and interviews was not essential to the research process in this study. I am not dismissing reliability as unimportant but rather that it is not the right term to apply to this study. There were aspects of it which were useful - the same interview schedule and observation schedule were used across both schools and with each teacher. The approach, therefore, was consistent so to use Robson's definition there was some stability and consistency within the data collection process. A second term which is often used in research is that of validity which reflects the extent to which the research findings have addressed the research questions. Somekh and Lewin (2005) suggest one of the difficulties of using this term with qualitative research is that again it is embedded in a context of measuring outcomes and rooted in quantitative research. Although still not an ideal term to apply to this study Silverman (2011, p269) discusses validity and suggests that it can be achieved through comparison of different methods of data collection

"e.g. observation and interview" and "taking one's findings back to the subjects being studied ... known as respondent validation" (*ibid*) or "member checking" (Hamilton and Corbett-Whittier 2013, p136). My study made use of both of these data collection methods and follow up discussions took place with the participants in both schools to clarify where there was ambiguity over content in the interviews and informal discussions that took place. The research design and the data collection tools, through the piloting process, did yield data which allowed the research questions to be answered. Again, in part, the term is useful for supporting the research process.

Although both of the terms reliability and validity are prominent in the discussion of research methods, for the purpose of this qualitative study I am going to use the term rigour to describe the consistent application of the data collection tools and the handling of data through the analysis. In this context, rigour embraces the aspects of reliability and validity which can be met through this qualitative approach.

The final section of this chapter will now outline the ethical considerations relevant to this study and the measures that were in place to ensure confidentiality and security of the data.

3.5 Ethics

Approval for this study was sought and given by the Sheffield Hallam University Ethics Committee. Although Robson (2011, p194) states "there is potential for harm, stress and anxiety, and a myriad of other negative consequences for research

participants" it was felt that these were sufficiently negligible for the potential benefits of undertaking the research to outweigh such risks. The participants were self-selecting with the right to withdraw from the study. This was evidenced with the first teachers involved from School B who disengaged from the study. The data was kept confidential through coding and storage in a locked filing cabinet with the coding key in a separate location and electronic data password protected. Individual teachers and schools are not named within the study and the schools' locations kept to broad geographical areas to minimise potential recognition. After the study was completed participants were able to view a summary of the findings to which they could respond. It was possible that the teachers' practice may have benefitted through engaging in reflective dialogue with the researcher after observations and interviews. There was a small risk that the teachers involved reflected upon their practice and identified their practice as being less than good. To minimise this, the reflective dialogue was couched in terms which indicated the non-judgemental nature of the study. The focus of interview questions related to **what** rather than **how well** the participants had taught.

3.6 Summary

This chapter has outlined the design of the study including the methods adopted and the handling of the data collected. It has aimed to demonstrate that there are no absolute or perfect approaches when it comes to undertaking research and a best fit model, depending on the aims of the research, is able to yield valuable information when employed with consideration of the limitations and an awareness of potential pitfalls. The following chapter will present the findings of the research, describing

emerging themes supported by quotations from interviews, details from observations and additional comments from field notes and the wider informal data collected throughout the study.

Chapter 4

Description of Findings

4.1 Introduction

The nature of this chapter is to present a descriptive account of the findings arising from the data analysis. It also raises questions in relation to the data that will be discussed in the following chapter, establishing and elaborating upon appropriate theories in an attempt to explain and elucidate the pedagogy of teaching in the outdoor setting. A short paragraph at the end of each section summarises the main findings and raises key questions in relation to them. The theories and frameworks pertinent to these questions are then outlined and indicate the discussion which will be fully explored in the Discussion of Findings, Chapter 5.

The initial undertaking of data analysis resulted in a number of recurring categories emerging from interviews with the participating teachers. In order to make the data manageable and communicable these categories were linked together and collapsed to form a coherent structure to this chapter. The focus of this research was twofold; to explore the characteristics of pedagogy of teaching in the outdoor setting and the perceptions primary teachers hold in relation to teaching in the outdoor setting. In order to address these I have grouped the categories under two broad banners.

- *Behaviour*: this section will consider all teacher behaviours, children's behaviours and the interrelationships between the two. It will address changes in children's behaviour and the novelty of the outdoor setting, disapproval when teaching within the classroom and in the outdoor setting as well as changes in the behaviour management strategies employed and the nature of the relationship between the teachers and the children.

- *Teaching*: this section will address planning for and using the outdoor setting. It will consider the dominant classroom approach used by the teachers, the issues around planning for teaching in the outdoor setting before reporting the teachers' views of the role of Continuing Professional Development (CPD) and support from their colleagues and SLT. The final sections reflect on perceptions of teacher confidence and the place of assessment when teaching in the outdoor setting.

Although to some extent I recognise making absolute distinctions between these two areas of behaviour and teaching is something of a forced dichotomy they have been separated in order to make clear sense of them. They are best fit categories that allow logical and coherent discussions of the main themes arising within the study with the aim of addressing the research questions. Where appropriate, the views of the SLT will be subsumed within these two groups offering another perspective to that of the teachers interviewed. Observation data will be compared with the teachers' perceptions and accompanying notes drawn upon to add further depth to the findings presented. In order to preserve the anonymity of the participants their names have been coded. Each school is

identified by either the letter A or B preceding a number which refers to the order in which the participants were interviewed (for example A2 refers to the second teacher of School A that was interviewed, B3 refers to the third teacher interviewed in School B). The observations were also coded alphabetically with A-H taking place in School A and J-N in School B.

4.2 Behaviour

4.2.1 Children's Behaviour and Novelty

The teachers described the children's behaviour as being different in the outdoor setting from that presented in the classroom. Interestingly the ways in which the teachers described the children's behaviour differed depending upon which participant school they taught in. School A, which had an extensive programme for outdoor learning, immediately indicated there were many positive aspects to the children's behaviour in the outdoor setting suggesting the children were "more supportive of each other" (A1), "more confident" (A2), "more enthusiastic ... and they want to learn" (A3). A number of the teachers described the impact of being in the outdoor setting on the talk of the children suggesting examples of where the variety of language used had not been heard before when moving to work outside (teacher A2, for example). Another teacher described the outdoor setting as a place where:

> discussion flows more and even the below average children are all talking to one another ... they might not write as much but they have that discussion. (A3)

The teachers went on to describe how they had accepted behaviour that was different from that within the classroom:

> in the sense that they don't need to be quiet because there is more space. (AOLC)
>
> if children are listening and engaged I don't mind if they are holding a stick or rustling leaves under their feet. (A4)

It was these distractions and the volume of talk that teachers in School B found to be the more challenging aspects of working with children in the outdoor setting. Through the course of interviews the teachers stated:

> They're a lot louder … they just seem to shout a lot more … I'd say that is the main obstacle [to taking children into the outdoor setting]. (B1)
>
> They're easily distracted, a lot more easily distracted when they're outside. (B2)

Having suggested that there was generally a change in the children's behaviour the teachers offered some explanations of why this was possibly the case; the novelty factor appeared to play a strong role.

One teacher from School B suggested that "they're not used to it, I think they get giddy and silly" (B1) which indicated there was a relationship between behaviour and the novelty of working outside. This was explored within the interviews and it was something that was felt to be important in both schools. Both sets of teachers described their children as generally coming from backgrounds where, due to the city centre locations, spending time in an outdoor setting was unlikely to happen or to be a priority for parents of the children. The Headteacher of School B identified

this as being one of the key reasons for undertaking teaching in an outdoor setting within the school:

> We made that [teaching in an outdoor setting] one of our drivers, because we felt as if our children didn't actually go out very often. If they go anywhere they go in a car to Birmingham or Manchester to see relatives, and they are basically getting into a car and going somewhere else, into a house. They're going from one house to another and that's it. So they didn't actually ever go outside, as it were, into the outside world. (BSLT)

This was felt to be equally important by the SLT of School A where the Headteacher described the limited experience the children have of the outdoors:

> We wanted to enable the children to have access to different experiences that they wouldn't have within an urban setting. Lots of them, the only thing that they experience of nature, in as much, is some of them have a backyard. None of them have been to anywhere like Dunham, as a National Trust property. No one had really climbed any trees or experienced bugs under logs or anything like that. So we wanted to do that, and we wanted to try and develop. (ASLT1)

The teachers in School B described the challenging changes in behaviour of the children and suggested that this was at least in part due to the novelty of working in the outdoor setting and "sometimes when they are outside it is just like having a different age range, just because of their unfamiliarity with the situation" (B2). In School A the teachers felt that this change in behaviour was somewhat eliminated due to the frequency of the use of the outdoor setting:

> There's no giddiness about being outside anymore, there's no excitement in the sense of "we're free". You know there's just this 'This is what we do and we use the outdoors to support us'. (AOLC)

This view was also supported by a member of the SLT who described her thoughts on the teachers' approach to taking their class into the outdoor setting:

> I did a learning walk one day and there were more classes out than in, and there were multiple classes using more than one area, really effectively as well … I think it's become more common practice to consider 'at what point this week am I going out?' … so there wouldn't have been a class that hasn't been out this week, and that's amazing. (ASLT2)

The changes in the children's behaviour described by the teachers suggested that the children were able to engage more positively with the outdoor setting and behave in ways that were perceived as more appropriate for a learning environment when they had greater familiarity with the setting.

Summary

The teachers from School A suggested the children's behaviour was influenced positively by being in the outdoor setting with increased engagement and perhaps suggestions of increased confidence exemplified through wider use of descriptive language and approaches to challenging work. Participants from School B described the children as being distracted by the novelty of working in the outdoor setting and generally found them to be louder and more disruptive.

The changes in the children's behaviour and the described impact of novelty raised some themes:

- What can teachers do to minimise the distracting impact of novelty?

- What does the pedagogy 'look like' for teachers who are managing the changes in the children's behaviour to support teaching?

Aikenhead (1997) writes of crossing borders between different cultures and indicates that children are able to do this with varying success depending upon the extent of the difference between these cultures. He uses terms such as discordance and incongruence to describe the shift from one setting to another. Although his studies were set in the context of the science classroom the principles of this are being extended to this study to offer an explanation for the changes in the children's behaviour. The discussion will also draw upon the work by Bernstein exploring recognition and realisation rules to explain how the children move from a novel setting to one in which they are able to learn more effectively. Using Bernstein's work will support the discussion in creating a framework which shows how the discordance and incongruence Aikenhead writes of can be, at least, managed and minimised.

Changes in the children's behaviour also impacted on the teachers' responses to the children observed and identified in terms of the frequency with which children were reprimanded. This was explored through observations and in discussion during the interviews. The next section will report findings under the category of teachers' disapproval.

4.2.2 Teachers' Disapproval

The difference in the changes in behaviour between the two schools was also highlighted through discussion with the teachers of instances of disapproval. The teachers were asked about how often they felt they were reprimanding children in the classroom compared to when they had taught the class in the outdoor setting. Teachers in School A suggested there was little difference but if there was, then there was less of a need to reprimand the children outside than when teaching them inside. They suggested:

> I think it's the same, I don't see a massive difference. (A4)
>
> I don't have to be as pushy. (A3)
>
> we tend to tell off our insiders more, which would be like using their loud voices and running around, which I guess outside are acceptable … so perhaps with that it's different, there are sort of different rules. (A2)

The latter comment was made by a teacher from the Early Year's setting of School A and observations of her teaching, and her colleague in the same setting, matched their own analysis of disapproval rates. During two one-hour observations of these teachers one did not reprimand the children when either inside or outside the classroom (observation E). The second teacher spoke to two children about their behaviour during the morning phonics lesson moving one of them to a different place on the carpet (observation H). The same children who were reprimanded for misbehaving during the phonics session at the start of the day when arguing with peers outside were encouraged to find their own solution to the problem. One of the teachers from this school made the point "I think it is really important you are not

telling kids off for being kids" (A1) and explained when they are responding excitedly to the dynamics of working in the outdoor setting, for example finding living creatures or playing with sticks under their feet, they should not be reprimanded for this expected behaviour.

The observations of teaching in School A where lessons started within the classroom, moved to the outdoor setting and then returned to the inside generally noted a small increase in the disapproval rates after returning to the classroom from the outdoors. Where the teacher AOLC (observation D) did not reprimand the children during a period of working outside for forty five minutes, upon returning to the classroom in the last thirty minutes of the lesson there were two instances of children being admonished. Two other teachers (observations B & C) demonstrated similar patterns with an increase from one reprimand when working in the outdoor setting to three in a similar timeframe when moving back to the classroom. Accompanying notes to Observations C, D, F, L and N refer to the children being more distracted, noisy and less responsive to the teachers' questions on return to the classroom from being outside.

Contrasting with School A, the teachers of School B immediately perceived an increase of disapprovals as they move outside – they described themselves as:

> Spending a lot more time shouting. (B1)
>
> Giving more warnings if they [the children] are outside. (B3)

> Spending more time keeping them engaged in what they are meant to be doing rather than going away with the fairies. (B2)

When looking at the observations comparing these teachers' teaching in the classroom to teaching in the outdoor setting the documented disapproval rates were actually higher within the classroom. The teachers' perceptions of when they were reprimanding the children were not supported through observational data. Observation of teacher B3 found she did not reprimand the children at all when working in the outdoor setting but did so three times within the classroom (twice before going out and once when back in the classroom (Observation K)). Another observation of a teacher (B2) in this school noted eight instances of children being reprimanded within the classroom; in the following lesson outside she did not reprimand any of the children (observations M and N). This was discussed in the interviews with these teachers and one of the School B teachers suggested in her interview that although she felt she reprimanded the children more outside she did not follow this through to sanctions as frequently as she did within the classroom. She felt the children "don't respond as well when they are outside" (B2) but also recognised that the timeout rules of the classroom (ten minutes time out if reprimanded twice) were not enforced when outside. Each of these teachers discussed the need for greater management of trying to get the children to adhere to the rules and expectations they had established outside and yet observations of their teaching in the outdoor setting suggested inconsistencies with their stringency. Clear rules were established at the beginning of the lesson or part of the lesson taking place in the outdoor setting in terms of what the children were allowed to do, where they could go and how they should be working in groups. Observation data showed that

these rules were not enforced during any of the lessons – the children moved far more freely in areas previously stated as out of bounds, often worked in different groups and ran when told they ought to have walked. Notes accompanying Observation N described where children were instructed as to which area of the grounds they were allowed to work in and that they were instructed to do this quietly. The notes stated:

> learners are shouting and being very loud. Some go to the other side of the playground. Children ignore instructions and the teachers ignore this!. (Observation N)

This is not to say that the children were overtly poorly behaved or not undertaking the tasks set – rather that the perception of the teachers' increased stringency in expectations of behaviour were, in reality, enforced far less outside than in the classroom. What emerged was a sense of conflict in the teachers' aspirations for behaviour of the children when teaching outside and what they felt was applicable in terms of actively managing behaviour.

Summary

The perceptions held by the teachers in both schools differed from the observations made during the study in relation to the frequency with which the children were reprimanded. In school A a small increase in the number of reprimands was noted upon returning to the classroom after working in the outdoor setting and in School B the frequency of disapproval was less than the teachers perceived. A theme for discussion arising from this section is:

- Why the instances of children being reprimanded might increase upon the return to the classroom?

The transitions between inside the classroom to the outside setting and *vice versa* further exemplify the borders to be crossed as described in the previous section on Children's Behaviour and Novelty. This is discussed in the next chapter and seeks to offer some explanation of the borders being crossed and the impact of these on the behaviour and actions of the children and teachers. The key constructs of Aikenhead's border crossing and Bernstein's recognition and realisation rules will be referred to in order to offer an explanation of these changes.

4.2.3 Behaviour Management

One of the challenges identified by the teachers in School B, and alluded to in the previous section, was that of behaviour management. Each of these teachers described their approach to behaviour management as trying to maintain what they did in the classroom. There appeared to be some conflict arising through the dialogue with them – they set out determined to be as stringent, if not more so, outside than when in the classroom but did not achieve this in observed practice. One possible explanation for this is that the teachers were equally trying to make sense of this setting in which they are unfamiliar. When asked about teaching in the outdoor setting one teacher responded saying "I'm not used to it, I am used to being in a classroom. I know if I am inside, I know what I am doing" (B3). She made reference to this knowledge of what she is doing in terms of her planning, managing the

behaviour of the children and using effective sanctions and generally having the confidence and a sense of ability to teach in that setting.

Emerging through each of the interviews with the teachers from School B was a sense of trying to maintain control of the whole class in the outdoor setting and intimations that they were unsuccessful and failing in some way with this which aroused negative feelings and a reluctance to take the children out frequently. This is something, perhaps, of a tautological self-fulfilling situation if novelty is contributing to both the children's and teachers' behaviour in the outdoor setting.

The teachers in School A also recognised the potential for the children to behave in a way that was not acceptable and did not suggest that all children responded positively in the outdoor setting all of the time. They did, however, appear to hold a more acute awareness of the changes in their own management of behaviour in response to the children in the outdoor setting. One described the need for his tolerance to be greater as there are more things going on outside, another suggested there should be greater openness and flexibility and another identified the importance of "not trying to beat the outdoors, I guess, just trying to work with it instead" (A2).

Summary

Discussion with the teachers around behaviour management raised some conflict for the teachers in School B who struggled to make sense of managing the children's behaviour in the outdoor setting. There was an element of this which related to the teachers' own sense of the setting which will be discussed more fully in subsequent sections of this chapter. The teachers in School A described having a greater tolerance of the children's behaviour and indicated some awareness of a shift in their behaviour management strategies whilst in the outdoor setting. The key theme arising from this section is:

- Are there key changes in the teachers' pedagogical and behaviour management approaches that can be made in order to support the children's behaviours in the outdoor setting?

Linked with the ideas of recognition and realisation rules is framing which Bernstein characterised as strong or weak depending on the control exerted by the classroom teacher on the communicative discourse within the classroom. Observations of the teachers' teaching and interview discussions suggest the teachers in School B undertaking teaching in the outdoor setting are striving less frequently for much stronger framing in the outside setting than teachers in School A. Chien and Wallace (2004, p2) describe framing as "responsible for providing the acquirer with the necessary skills to manoeuvre around the classroom and the space". The discussion of this section is based upon the following theory emerging from this study:

> The teachers are not cognisant of the discordance the children, and they themselves, face in the outdoor setting context therefore strong framing applied in the classroom will not necessarily provide the support required for working in the outdoor setting

The Discussion of Findings chapter will explore the need for teachers to engage with the recognition and realisation rules of the contexts and whilst their responses to novel settings are not the same as that of the children they were similarly not achieving what Chien and Wallace (2004) describe as successful orientation.

4.2.4 Changes in Relationships

One of the themes emerging from the interviews with the teachers in School A was the changes in their relationship with the children when working outside. When they were teaching in this setting they exercised far less control over the interactions between children and children and teacher. In each of the observations in the outdoor setting in School A there were conversations between children and the teacher which were unrelated to the work they were doing and of a more personal nature. For example, during the observation of A5 (observation G) the children were creating art work with leaves, stones and other natural objects they could find. One girl in a small group asked the teacher about the pictures she had in her house. They held a conversation about this and the teacher then moved on to talk with another group. Observations of the teachers within the classroom indicated they encouraged the children to remain more focussed on the content of the lesson when talking to the teacher and with each other. Although the observations in School B identified points where the children wanted to talk beyond the content of the lesson with the teacher they were usually cut short and the children refocused upon what they were meant to be doing. The teachers here appeared to be trying to maintain limited options for

interactions. The more open approach from the School A teachers gave rise to exchanges between children and teachers not seen in School B:

> They are more willing to come up to me and discuss things; there's a lot more discussion. So even the ladybird, like, you'd get them describing what they'd be asking me 'Oh do you like ladybirds' or 'I've heard that one's poisonous' because it was black and orange. So there's lots of discussion and there is that part of learning but it's also informal. I guess it's getting them thinking about how to talk to people, how to have a conversation. (A3)

> They are more relaxed outside and they are much more likely to have an informal conversation. We walk out of the room to here or the orchard and we don't walk in a line – why would we? I will just say meet at the steps and they will run ahead, quite often a kid or two will come up to me and have a conversation about something different. They are chatty … they might come up and tell me stuff or ask me stuff. It might be work related but it might not. Those moments don't happen in the classroom and that means you get a different insight into these children. (AOLC)

One of the teachers from School B when asked if she thought her own role changed when outside responded by saying "I still find that really hard to manage, changing my boundaries with them" (B1). Another talked about her change in role very much in terms of managing behaviour and stated:

> I'm trying to make sure who's listening … I'm worried they might not know what they are doing and if they don't know what they are doing they are going to mess about. (B3)

Again this reflected an attempt to maintain stronger control over the classes, a journey which one teacher from School A, who had more recently started to use the outdoor setting with greater frequency, described as something which required a determined approach to overcome:

> This is something I have found quite challenging. Inside I find it very easy to work with a group and push their learning on and target misconceptions. The outside I am trying to overcome is just drifting between groups, sort of monitoring, which feels less like furthering the learning of specific children. I have to keep combatting that within myself, and I think the reason is that the children are so dispersed … what are they actually doing I have no idea, because they are so far away. I'm trying to sort of rein that in but it's quite a hard impulse to sort of rein in really. (A4)

This teacher was beginning to make links between the children in the outdoor setting and their learning rather than the absolute focus on behaviour seen in the dialogue with teachers from School B. He was describing the dissonance he felt when trying to move away from something that dominated his inside classroom practice – monitoring of learning and behaviour – to being a teacher in the outdoor setting where his focus had unintentionally shifted from learning to behaviour. Two other teachers at School A described their role when teaching in the outdoor setting in terms of supporting the children's learning. One suggested the children led their own learning outside and his role was to "offer support for the children so they still get the same support regardless of the environment they are in" (A1) and another reflects that she was "probably more hands on in the classroom but I think maybe because it's a smaller space as well things need to be more in control than outside" (A2).

Summary

The relationships between the teachers and children in school A were described as generally more positive and open to wider discussion of topics which were not related to the content of the lesson. This contrasted with observations in School B where such off-task discussions were curtailed. The teachers raised the issue of

control throughout the discussions around the relationships with the children in the outdoor setting. Although control was not something discussed and elaborated upon in detail within the interviews the teachers describe the extent to which they are willing, or not, to have discussions with the children which are not work-related. A key theme to be addressed relates to the discussions held between teachers and children in the outdoor setting:

- What is the impact of control of discussion on the development of a pedagogical model which represents effective teaching in the outdoor setting?

Bernstein's theory suggests control of discourse is a key element of whether framing is strong or weak within the classroom and this will be discussed in the next chapter. This will also form the basis for developing a model which shows a shift in the framing between the classroom and the outdoor setting seen in School A but not School B.

To this point this chapter has given consideration to the behaviour aspects of the findings, highlighting key points in relation to changes in the children's and teachers' behaviour as well as the management and interrelations of these. I will now describe the teachers' teaching in more detail.

4.3. Teaching

4.3.1.Dominant Classroom Approach, Planning and Assessment

One of the key statements made by a teacher from School B, quoted earlier in this chapter, was "I'm used to being in a classroom" further supported by her description of behaviour management strategies not working effectively for her and her lack of a backup strategy as she was not in the classroom. She said that within the classroom she "knew what she was doing". Another teacher from School A compared her teaching in the classroom with the outdoor setting saying "You just subconsciously think that in the classroom you have to do it in a certain way" (A3). Each of these statements adds weight to the argument that there is a dominant classroom pedagogy that teachers adopt and, by implication, that there is not a dominant outdoor pedagogy.

A view shared by the participants from both schools was that of using the outdoors as a resource rather than simply moving a lesson to the outdoor setting and the importance of making teaching of the lesson content relevant to this environment. One teacher from school B identified making meaningful links as a challenge and indicated that "if you're making tenuous links to try to just get them outside I don't think it works" (B3). Another highlighted that choosing to work outdoors did not equate to outdoor learning and that there needed to be more specific use of the outdoors as a resource:

> When we go looking at mini-beasts, or when we've done local area walks, or things like that, I would count that as outdoor learning, but not necessarily if it was just a guided reading group outside, no. (B1)

Teacher A1 from School A offered this description of how the outdoor setting acted as a resource to enhance learning:

> For me it is about using the outdoors as a resource for supporting learning; for example, the similes or personification lesson that supported their imaginations because they could hear and they could see … they said the trees were whispering actually when it was the wind blowing the trees but using that as a resource to really get the creative language to come out of them. Some of them said the leaves were whispering that they looked like friends chatting on the floor. (A1)

If teachers are to effectively use the outdoors as a resource and not simply as a space for teaching then it requires careful planning prior to the lesson which takes into account the changes in children's behaviour, the potential issues with using classroom resources in the outdoor setting and focussing children's learning. Planning was explored within the interviews and there were two strands to the responses – resources and learning. Teacher B2 from School B described the situation:

> we've not got the tables and things so it's using the outdoors …having to think about what they take outside with them in order to record whatever they've found. (B2)

Her colleague described the logistics of setting out resources:

> It's got to be a prop that has to be really closely set out which is always a pain when it's colder because if you are setting props out for anything, all the time you are setting them up the children are waiting. (B1)

During one observation at this school it started to rain and the children were unable to write on their whiteboards. The teacher asked the children to leave them behind and talk through their answers. She described this during the interview indicating it requires more thought to get the right resources for enabling the children to write and record within the lesson. Teachers in School A also discussed the resourcing of teaching in the outdoor setting. Teacher A4 stated:

> Convention is you've got your tables that you sit at in a classroom and you give them activities to do and they get on with them at the tables. Because they are away from that environment you have to think differently about how to set things up. Even just things about where do they do the task? How do they do the task? Whereas in class, again, I'm talking about conventions, we're trying to move away from that. It tends to be "Oh, they'll do that on white boards or in their books, sit them in their table groups. You're trying to move away from that, you know, so I think I have to think and plan differently, but I don't think that's a negative. I don't see that as a problem. (A4)

Teacher A1 from the same school suggested

> You've got to be really creative with resources as you don't have an interactive whiteboard, you don't have another whiteboard you can scribble on at any point so you've got to think 'Right, what can I use?' … I will scribble on the ground or will take little white boards and go tell each group a different thing. (A1)

The Outdoor Learning Coordinator from School A suggested that it was a matter of resourcing and provision that enabled teachers to manage resources outside. She suggested each classroom having a set of clipboards was a small but significant move towards supporting the classes with the resources required to be used in the outdoor setting.

The starting point for teaching in the outdoor setting differed between the schools. Both Headteachers suggested that a focus on teaching in the outdoor setting underpinned the school ethos. In school A the prevalence of teaching in the outdoor setting has already been emphasised. For the teachers, and the SLT, the premise was "at what point are we out this week, and what are we out for?" (ASLT2). She described in more detail the purposeful nature of teaching in the outdoor setting at the school:

> What it is we are going out for? We have been hammering purposeful learning here for years but it's like 'Why are we going out and what are they going to achieve out there?' People are much more proactive in thinking about those outcomes and I think that's come back into the classroom as well. It's the 'so what' of everything. 'Well, why are we doing this activity? What do we want them to learn?' (ASLT2)

School A teachers appeared to see the outdoor setting as a resource for teaching the same way they see the white boards and books. Their lesson outcomes were formulated with the setting in mind. Teacher B3 from School B was approaching teaching in the outdoors from another perspective where "I think we need to go outside so how can I go outside and meet this learning objective?". This suggests a difference in the two schools, similar to the management of the class, between a focus of teaching and learning, for School A, but more a sense of obligation to be working beyond the classroom for School B.

In addition to the personal and professional dilemmas and challenges these teachers faced when teaching in the classroom and outdoor setting, there is the matter of meeting the demands of the wider school and government agendas. A significant

pressure on schools in general is that of demonstrating children's progress and undertaking assessment to evidence such progress in learning. One of the areas that I wanted to explore with staff was that of managing assessment with their classes when in the outdoor setting as opposed to within the classroom. One teacher from School A described how some of the assessment strategies were unable to be transferred to the outdoor setting:

> So we use traffic light cups in our school. We have hinge questions and exit questions. I find that really hard to do outside. I don't really want the children walking round with their cups; if you're outside it's not a natural thing to have with you! If you are doing a hinge question it means pulling them back in from whatever they are doing and sending them off again. It's do-able. But just feels less natural. So I kind of go to the question, well is it the right thing to do outside. So I find that sort of AfL aspect of my practice and our ethos difficult to balance. It doesn't mean to say I don't think it can be done, it just means I haven't done it yet. (A4)

One of the teachers in School B also identified these challenges suggesting she found assessing in the outdoor setting nearly impossible without another member of staff to support her. This she linked, in part, to finding differentiation harder outside the classroom. Her colleague agreed that it was more difficult but suggested there were alternative approaches to assessment that suited the outdoor setting:

> Things like photographing them, observing them, having other members of staff observe them … getting them all back inside and then talk to them. (B3)

This practice was certainly mirrored in the Early Years settings where observational evidence of progress was considered of great value and these approaches were also encouraged by the Headteacher of School A. She suggested:

> When you are talking about, you know, sort of levelling of writing and things like that, it depends how you actually use the outdoors. You know one of the Year 4s last year made a den. All the children went outside, they sat in the den, they talked about the different feelings, different emotions of being outside, the creation of it. They went off and collected items, brought them back, then used those items within a story setting. The writing that was produced was just amazing, so it really does support what is going on. Using the iPads it can be aimed and differentiated at different levels. So children can take photographs, they can annotate using Skitch, or they can use Pages to write stories. (ASLT1)

The links between planning and setting outcomes or objectives specifically formulated for teaching in the outdoor setting became apparent when considering the challenges of assessing children and recognising that:

> listening to the dialogue between the learners is valuable ... it's not just about listening to what one child says but about listening to how they respond to the previous comment made by their peer that shows their real understanding. (A1)

Summary

The teachers in School B described the challenges they had in making the transition in terms of planning and extending classroom pedagogical approaches to teaching in the outdoor setting. The teachers from School A indicated that planning and pedagogy had to be approached with the intention of the outdoor setting being at the centre of the lesson rather than focussing on the content and trying to make that fit with a lesson in the outdoors. These descriptions lead to key themes which form part of the main focus of this study:

- What are the particular characteristics of effective planning and pedagogy for teaching in the outdoor setting?

- What extension to the teachers' Pedagogical Content Knowledge (PCK) need to take place in order to effect a pedagogy most suited to teaching in the outdoor setting?

In order to address these questions the concept of PCK will be discussed along with the underpinning theories of this study relating to Bernstein's framing and realisation rules.

4.3.2 Continuing Professional Development (CPD) and Teacher Support

Support for teaching in the outdoor setting was identified in both schools as of great importance. School A emphasised the use of the outdoor setting frequently and had invested heavily in establishing an ethos of teaching in the outdoors being part of normal teacher practice. The Deputy Headteacher stated that recognition of developing teachers' ability to teach effectively in the outdoor setting was prioritised in the same way as developing subject knowledge:

> We have supported with the amount of CPD people have received … it has quite a high priority so we have given lots of INSET time over to it. What we have tried to do is match things like people needing some subject knowledge in maths how can we support them in the outdoors. (ASLT2)

On a resource level there were wellington boots and waterproof clothing available for each child to use when outside. Areas of the school playground had been landscaped in a way to facilitate teaching – there were covered seated areas, an amphitheatre and a variety of different themes to the areas (courtyard, orchard, woodland). There were very few physical and resource obstacles to teaching taking place outdoors. The teachers interviewed spoke highly of the support offered in order

to help them teach in the outdoor setting commending especially the OLC for sharing good practice and as a source of support and guidance when needed.

The interview with the Headteacher of School B took a very interesting direction. From one of the opening statements of "One of our drivers is outdoor learning" the interview unfolded and the difference between the *idea* of a driver of teaching in the outdoor setting and realising it became apparent to the interviewee. She was asked about support for the staff who wanted to take classes outside and the following emerged:

> Obviously I would be here to offer advice, but no one … and that's a really good point, it's probably something that we need to do … because we do say to everyone that comes 'Oh you know one of our drivers is outdoor learning' but do we ever really..? We explored it when we developed the creative curriculum because all the staff were involved. It came from them as a need for our children. You know, that was two years ago, and we have had loads leaving, and entirely new staff. So , you know, we should probably be doing something that makes it clear as to what our expectations are and how to cope. We have CPD every Monday night. There's no reason that we can't make that a priority, and you know, I am actually going to write it down. A lot of the stuff you do take for granted, then nobody knows what it means. (BSLT)

The teachers of School B were asked what would support them in undertaking more teaching in the outdoor setting and each of them felt specific guidance from someone who had greater experience would be very beneficial.

> To see someone doing it really well. To actually watch someone, even to see somebody come in and work with my class or to have someone watch me and say 'that's different that's what they are finding hard, this is why they are doing that'. (B1)

> Being shown, really. What we can use and how we can use what's outside. When I think about taking them out I have to start from scratch and think 'well this is what we are doing, how can I link that?'. (B3)

The Deputy Headteacher of School A summed this up stating:

> So it's a bit of a classic; if I show you one thing you can do, go and do it, your confidence will grow, you'll realise 'actually I can do this' and then you will start to think of your own ways to do it. (ASLT2)

Summary

The teachers interviewed in both schools suggested a key element to making progress with their own teaching in the outdoor setting is that of having someone more knowledgeable to support them. The support network in School A was well established and there was a significant investment in terms of finances and time from the SLT and a named individual with responsibility for teaching in the outdoor setting. This contrasts with School B where the teachers felt there was little support and were unsure who could be approached to enable them to further their knowledge and understanding of how to teach most effectively in the outdoor setting. This lead to the following key theme arising:

- What is the impact of having an 'expert' available to support teachers in their teaching in the outdoor setting?

The discussion of this section will take Vygotsky's theory of the Zone of Proximal Development and extend this to apply to the teachers' development of pedagogy for teaching in the outdoor setting. It will also consider the recognition and realisation

rules Bernstein describes and how effective support from a more knowledgeable other, as Vygotsky describes, can support more conscious awareness of these. These notions will be brought together to offer a model which supports the transition from the classroom to the outdoor setting and with minimal incongruence and discordance that Aikenhead describes.

4.3.3 Confidence

The suggestion made by the Deputy Headteacher above was that related to CPD and support, as well as opportunities for gaining greater experience of working outside, was the notion of teacher confidence. The teachers in school B described their confidence as being lower when teaching in the outdoor setting than inside.

One said:

> I honestly, if I am honest about it, worry about taking them outside. I'd rather not take them outside so I tend to try and keep them inside. (B3)

and another stated that her confidence was less:

> because I find it hard to manage children out there so I don't feel as confident because the behaviour is worse. If someone comes outside to see what we're doing I would be like 'Oh no not while we're outside'. (B1)

The teachers in School A described themselves as confident in the outdoor setting; however, almost all of them indicate that this was a journey they had been on throughout their teaching experience:

> I am actually really confident outside now. I don't worry about having to manage the children because they are so used to being outside and that in turn improves my confidence in delivery because I know the expectations of learning is still there. (A1)

> We are 6 or 7 years into your teaching we are more confident. At first you are like 'ooh they could go anywhere'. I would be like 'let's make a line, let's walk around' but now I am like 'no, I understand they are fine and exploring'. (A2)

Another member of staff described his transition from reluctance to use the outdoor setting to embracing it as a means of supporting his teaching and children's learning. When asked about his confidence in teaching outside he responded:

> Well I have to be careful here, because there's a big factor which does affect it. That is my class are a lot calmer this year, a lot more sort of learning-ready than my class were last year. There were far more behavioural issues in my class last year. So I don't want that to cloud my judgement but I do feel a lot more confident. I think I can separate the two things out, and I think a big part of it is that I can see timing the activities is really key. You know if you get the timing right so the children know 'I've got this long to do it'. I'll put it in context, in a classroom you get a sense of children dropping off, children getting bored and the need to move on. Children are all over the place outside, I find that bit harder to do because I don't know what the groups are thinking, who are 50 yards away over there. I think that's very hard so I think that, kind of, really thinking through how they are going to stay engaged for, and the activity's really important. I feel a lot more confident at that now than I was twelve months ago. (A4)

The OLC at School A described to me a teacher who was lacking confidence in taking her new class outside because of the challenging behaviour of one or two individuals within it so I interviewed the teacher to try to identify what the arising challenges were. She described the home life of one particular child and mentioned issues such as stayed up late, irregular meal times and who struggled to identify

actions that are right or wrong. She suggested that although spending time in the outdoor setting might be of some benefit to him, all things considered, the structure of the classroom environment was more supportive for him as "it helps calm him down definitely ... he doesn't respond well to change" (A6). She explained the importance of allowing the rest of the class to experience teaching in the outdoor setting and supporting this child in another way – perhaps spending time outside with much smaller groups and a support assistant or managing teaching outdoors so that a group remains in the class and he stays with this group. Whilst many people talk of the benefits of teaching in the outdoor setting and write positively of the changes they see in children as with every other aspect of education there is not a one size fits all approach that can be adopted.

The Deputy Headteacher at this school, School A, described where the teachers started from in relation to their readiness to teach in the outdoor setting:

> So outdoor learning I think when the OLC came, was ready to go. We'd done a lot of work on the school grounds, so kind of, physically we were ready. Mentally I don't think the teachers were ready, and I don't think the children were able because the teachers weren't ready. (ASLT2)

This prompted the question of what is required in order to support teachers in becoming "ready" for teaching in the outdoor setting and subsequently supporting the children's learning in it? The model of pedagogy for teaching in the outdoor setting explored in the following chapters aims to address this point.

When observing another teacher at this school she talked about the difficulty of the children with 'indoor and outdoor cues' (Observation H) although when asked to elaborate upon what these cues were she struggled to articulate this but thought perhaps an example could be the children's response to coming back together for an activity (A2) . One of the teachers from School B also described some of the difficulties children had in reading the outdoor setting compared with the classroom where there are more signs for the children to respond to. She suggested that younger children found it more challenging to establish groups of a certain size when they did not have the chairs round a table to indicate how many people should be working there and that they used the tables as a physical divider:

> Outside there isn't a clear divide … they just haven't got a clue how to split up. All of them just go to the same place or two if you are lucky. (B1).

Summary

Confidence is a complex issue, and although this study did not focus specifically on this element, the teachers in school A described gaining increased confidence with experience of working in the outdoor setting and through having clearly defined support networks. The term used by the Deputy Headteacher from School A was that of teacher readiness and this raises the following key theme:

- What does a model of a teacher's pedagogy ready for teaching in the outdoor setting look like?

The child described by the teacher in School A offers an example which demonstrates that there are some children for whom the crossing of borders is too

diverse for them to make sense of and who therefore cannot function within a context different from their 'norm' – a transition Aikenhead (1995, p270) describes as "hazardous" due to how diverse the cultures are. This highlights the importance of the need for teachers to be aware of the borders to be crossed by the children when moving to work in the outdoor setting.

The notion of cues can be divided into two forms; the first is those cues that the teachers respond to in order to maintain an awareness of the children's behaviour and engagement with learning and the second those that the children respond to in order to make sense of the environment they are in. In the next chapter the notion of cues will be related to Bernstein's recognition and realisation rules and related to Chien and Wallace's (2004) suggestion that both the teacher and the children need to possess these in order to have some shared perceptions of the dynamic unfolding within the lesson.

The model created through the discussion of confidence in relation to Bernstein, Aikenhead's and Vygotsky's work will act as a means for visually representing effective pedagogy for teaching in the outdoor setting.

4.4 Summary

This chapter has portrayed teachers' teaching inside the classroom and in the outdoor setting making comparisons between School A, School B and the individuals within it. There have been references to theoretical frameworks such as Vygotsky's ZPD, Bernstein's realisation and recognition rules, strong and weak framing and Atkinson's border crossing. These will be discussed in the next chapter and be used to try to position the schools on a framework exploring the differences between effective classroom pedagogy and effective pedagogy for teaching in the outdoor setting.

Chapter 5

Discussion of Findings

5.1 Theoretical Underpinning and Reiteration of Key Terms

This chapter briefly outlines the key theories which have underpinned the work from the onset before introducing the additional theories which support the second half of the discussion. The chapter concludes with a section which identifies a framework which has the potential to move from a theoretical position identifying the characteristics of an effective outdoor pedagogy to realising these in practice.

The discussion presented uses two key theories to offer an explanation of the findings previously presented. Throughout the development of the study Bernstein and Aikenhead's work has played an integral role in the design and data collection. Their work will be utilised in the first half of this chapter to explain what was observed and elaborated on through the interviews. The second section of this chapter focusses more specifically upon the teachers' pedagogy and, as well as making use of Bernstein and Aikenhead's work, there are also additional theories drawn upon in order to offer plausible explanations of how the teachers may have made, or may make, the journey from their current teaching to a more effective approach in the outdoor setting.

The purpose of this study was to explore distinctive characteristics of an effective outdoor pedagogy and these are identified throughout the sections of this chapter.

These characteristics were not predetermined and emerged through the data analysis process and so the association with theories, in addition to Bernstein and Aikenhead's, has evolved as this study has progressed. They are by no means presented as the only explanation for the findings but in light of the data analysis and the, sometimes limited, evidence they offer sound support for the discussion of this work.

One of the reasons for undertaking the observations of teachers' teaching both in the classroom and outdoor setting was to establish a picture of any pedagogical differences between teaching in both contexts and then to compare these with the teachers' own perceptions. The initial theoretical framework used to establish the observation schedule was that of Bernstein's framing, which he describes as having the potential to be weak or strong. It is worth reiterating that the terms strong and weak are not a judgement on the teachers' teaching rather phrases used by Bernstein to describe the extent to which framing is established within the lesson.

As described on page 38 of this thesis, Bernstein defines framing as the communicative practices which are undertaken within the classroom and is described as strong or weak depending on the extent of the control exercised by the teacher in the classroom. Strong framing manifests itself with limited options for interaction between teacher and children whereas weak framing exhibits freedom and flexibility within the lesson (Bernstein 1981). The focus of this term is on communication and hence relationships between the teacher and the children during a lesson – the *how* things are taught - as opposed to classification which focuses on the curriculum – the *what* is being taught.

Classification is another of Bernstein's concepts, usually linked with framing. It can be described as the insulation of pockets of knowledge or maintenance of boundaries between areas of learning, which again can be strong or weak. "A curriculum that is highly differentiated and separated" is defined as having strong classification where weak classification is described as "a curriculum that is integrated and in which the boundaries between subjects are fragile" (Sadovik 2001, p688). This study focussed on the behaviour of teachers and the children within the lesson and so framing takes a more dominant position in this discussion than classification. Although it appears to be somewhat unconventional in existing literature to isolate these two terms, for the purpose of this study the emphasis will remain on framing.

Bernstein also makes reference to recognition and realisation rules that exist between different contexts and these will also be explored in relation to the findings. Bernstein (1981) suggests that children will initially **recognise** differences between the cultures and contexts (recognition rules) and then **realise** the relationship in relation to the context (realisation rules) as discussed within the Literature review. In this chapter Bernstein's recognition and realisation rules are linked with Chien and Wallace's (2004) suggestion that both the teacher and the children need to possess these in order to have some shared perceptions of the dynamic unfolding within the lesson.

Another key theory which supports this study is that of Border Crossing described by Aikenhead which will be addressed in relation to both the children's and the teachers' behaviour and actions within the findings of this work. It will act as part of a framework that helps explain the changes in behaviour observed between inside the

classroom and the outdoor setting, applicable to both the children and the teachers. Although the main aims of this study were to elucidate the teachers' perceptions and pedagogy, in order to make some sense of and establish a context for the pedagogical differences between teaching in the classroom and the outdoor setting, some discussion and analysis of the changes in children's behaviour and the possible reasons for this, will be offered.

Pedagogical Content Knowledge (PCK) was a term popularised by Shulman (1986) with his suggestion that subject knowledge and pedagogy were not dichotomous and should be combined (Hlas & Hilderbrandt 2010).This current study makes use of the belief that effective teaching in the outdoor setting demands, at least in part, a different pedagogy from teaching within the classroom and therefore will present a model which includes an extended PCK for teachers, developed to support the context of this study. This chapter will also make links between developing skills and pedagogical changes when teaching in the outdoor setting through application of Vygotsky's theory of the Zone of Proximal Development (ZPD). This stemmed from his social constructivist position that with the support of a More Knowledgeable Other (MKO) a learner can progress their knowledge and understanding further than when working alone. Traditionally embedded in the context of the child as a learner this theory will be extended to consider the role of a MKO in developing a teacher's PCK, confidence and management of the children when teaching in the outdoor setting. One of the theories related to the notion of a MKO in this chapter is drawn from the business model of Johari's Window (Luft and Ingham 1955) and offered as a tool for reflection as well as utilising a MKO in a key role for making changes to pedagogical approaches.

Other existing literature is used to substantiate the discussion; the theories identified above are not exclusive however they form the prominent basis for the explanations offered.

This chapter will now discuss each of the sections presented in the previous chapter. It will consider each of the areas in the context of existing literature linking these with the theories outlined above and expanding upon the content and arising themes of the summary sections in the Findings chapter. It will begin with Children's Behaviour and Novelty, progressing to Teacher Disapproval, Behaviour Management and Changes in relationships. Teachers' teaching, addressing the areas of Dominant Classroom Pedagogy, Planning and Assessment, and finally CPD, Support and Teacher Confidence will then be examined. The chapter will conclude with the presentation of a model which best represents effective pedagogy for teaching in the outdoor setting.

5.2 Children's Behaviour and Novelty

Changes in the children's behaviour were described within each of the school settings. What became apparent through observations and reflections by the teachers participating in this study was that the children who spend more time in the outdoor setting behaved in ways that were more conducive to learning. There was an impact on the children's, and subsequently teachers', behaviour when working in the outdoor setting was a novelty. Costa (1995) writes of discordance and incongruence of cultures and the increasing challenges children face in making transitions between cultures. The teachers' perceptions of the children's changes in behaviour certainly

suggested that this was true for the transition of the class from the classroom to the outdoor setting. School A minimised the discordance and increased congruence for making the transition. Aikenhead (1995) describes this smoother change as manageable. Teachers from School B, however, described the children's behaviour as giddy and overly excited to the point where it was detrimental to working in the outdoor setting – at least for the initial part of the lessons. My findings suggested this was because of the challenges these children faced in making sense of their less familiar environment – they were making a more hazardous transition between cultures that were diverse (Aikenhead 1995). As the children in School A were arguably more able to make sense of the outdoor setting, Chien and Wallace (2004, p2) would describe them as having "appropriate recognition rules for the culture [and] it will be seen in their successful orientation within that culture". These recognition rules allow the children to make sense of the outdoor setting and acknowledge its differences from the classroom. Bernstein (1991) developed this idea suggesting that if individuals also have the realisation rules for their specific context this allows them to communicate appropriately within that setting. Comparing these two schools there was some evidence to suggest the children of School A had become acquainted with both the recognition rules and realisation rules of the outdoor setting which allowed them to function more effectively within it whilst the children of School B recognised there was a difference from the classroom to the outdoor setting but had not yet adopted the realisation rules which enabled them to fully function within it.

The first characteristic of an effective pedagogy for teaching in the outdoor setting is one that supports children in making the transitions from within the classroom to beyond it

Questions emerged from the findings relating to what teachers could do to minimise the distracting impact of novelty and what the pedagogy may look like of the teacher who had developed strategies for managing novelty and such changes in behaviour. This study does not suggest that novelty can only have a negative impact upon children's learning but addresses the issues which the participating teachers highlighted as a result of the children working in a novel setting.

Teachers are familiar with establishing prior knowledge as a means of progressing children's' understanding of a concept. The first pedagogical shift proposed as a result of this study is that teachers should not only take into account what their children know about a topic or concept but extend this to consider what experiences the children have of working in particular settings. Through doing so teachers will be able to support transitions across borders from the classroom to the outdoor setting where they are initially incongruent or discordant. By making explicit things that will be familiar to the children, the differences they are exposed to when moving to the outdoor setting can be decreased. These familiarities may initially be working in groups they have been in within the classroom, some resources taken from the classroom to the outdoor setting or working in a part of the playground the children are allowed to be in at lunch or playtime.

A teacher from School A described a child who negatively impacted on her taking the class outside. This is potentially an example of a child Costa (1995) would

describe as an Outsider - his home life was not supportive of the school ethos and culture. He struggled to make sense of the rules and expected behaviour within the classroom and this extended to his time in the outdoor setting. This example demonstrated that there are some children for whom the crossing of borders is too diverse for them to make sense of it and who therefore find it challenging to function within anything different from their 'norm' – a transition Aikenhead (1995, p270) describes as "hazardous" due to how diverse the cultures are[1]. The general impression the teachers held of the children – in both School A and B – was that of family lives where their city-based living and cultural backgrounds impede the potential for time spent with families in an outdoor setting. I do not have sufficient detail of the children's home lives to be able to confirm nor deny this judgement. However, if I am to trust the teachers' judgements as accurate, when they came to school and experienced the opportunity to work in the outdoor setting the situation was new to them and their familiarity with the rules of this required some negotiation. Costa (1995, p315) admits that establishing information about the children's home lives and how supportive they are of the school ethos does not "fully capture the complexities and uniqueness of students' thinking and lives". She does however go on to suggest that it can "reveal important differences in student responses to school science that inform our understanding of what goes on in science classrooms" (*ibid*, p315). I believe this to be equally applicable to supporting some understanding of what goes on when children move from the classroom to the outdoor setting. If children are coming to the school with cultures that are incongruent with the outdoor setting School A has an underpinning aim, and teachers

[1] With the focus of this study being on the teachers' teaching and generating a general framework there are has been no specific consideration of children with special educational needs and the impact of this upon their transition of borders.

who consequently action, the move to support for these children to developing congruence with it.

The second characteristic of a framework to support teachers in the outdoor setting is one where there is both regular and frequent use of the outdoor setting.

There was a close relationship between novelty and behaviour observed through this study. Repeated exposure to the outdoor setting so children no longer respond in the overly excited way described by the teachers of School B but can engage with learning more fully as in School A will minimise the impact of novelty. Once the impact of novelty is diminished the children can be supported to recognise the differences between the outdoor setting and the classroom and begin to realise the rules they need to adopt in order to function within the setting. Cotton (2009) describes four forms of novelty when working in the outdoors - Cognitive, Geographical, Psychological and Social. She states "the complexity of the environment may prove overwhelming for the student, and the 'novelty effect' of visiting new and unusual settings may hinder learning" (*ibid*, p169). The study she undertook with Undergraduate Biologists has parallels with children and teachers who are unfamiliar with working in the outdoor setting. She describes Cognitive Novelty as consisting of two elements. The first relates to unfamiliarity with the organisms living in the environment and the second to the statistical and mathematical requirements of undertaking field work. In the case of the primary-aged children the latter is of little relevance. In the school grounds there are few organisms the children are unfamiliar with – they may not know the names of specific trees, birds or insects however they all have some knowledge of these. The

teachers in School A suggested unexpectedly finding insects or other animals could enhance the learning experience when in the outdoor setting which conflicts to some extent with Cotton's suggestion. This however is in a setting where the children had overcome the novelty impact in the other areas Cotton raises.

Geographical Novelty is linked with Cognitive Novelty by Cotton who states in the new setting "the major impact on learning appeared to be that students were sometimes very over-excited about the wildlife. This may make for memorable experiences, but what the students learnt from these encounters is less clear" (*ibid*, p172). This was certainly reflected in the accounts by the teachers from School B who described the excitement of the children as inhibiting learning. She goes on to suggest the psychological impact of working in an unfamiliar setting is significant and can reduce the potential for learning with many of the students being acutely aware of the climate, feeling hungry or tiring more quickly. Cotton (2009) indicates that the Health and Safety requirements when working in the outdoors extend beyond physical elements and the teachers should monitor the emotional state of the learners as well. The children in both schools were very familiar with the environments they were working in when in the outdoor setting as they were the immediate school grounds and play areas so the impact of novelty in that instance is minimal. However, School A teachers demonstrated how they were aware of the importance of ensuring the children's basic needs were met. The school provided appropriate clothing and footwear when working in the outdoor setting ensuring the children were always warm and dry. Maslow (2013) published his theory of a Hierarchy of Need initially in 1943 but developed it over a twenty year period. He proposed that without basic physiological needs being met in a safe environment

learning would not take place and Cotton's suggestions apply this to learning in the outdoor setting. My study indicated that teachers in School A were addressing the children's needs, although not necessarily consciously, in order to establish the best psychological state for learning.

The final form of novelty Cotton (2009) suggests is relevant when working in the outdoor setting, is Social. Although her study focussed on residential fieldwork and so a number of her observations are not mirrored when working in the schools' grounds her findings in relation to interactions are pertinent. She suggests the dynamics of social interactions between learners and the teacher shift when working in the outdoor setting and that some learners are able to manage this more effectively than others. The changes in the relationships between the teacher and children are discussed more fully later in this chapter.

The conclusions of Cotton's study (2009, p173) suggest

> where discomfort factors can be reduced, it seems likely that students will be more readily able to engage in productive learning and take full advantage of the experiential learning opportunities offered.

She also indicates that preparing the students for working in the new setting, both psychologically and physically, improves learning.

The third characteristic of an effective pedagogy for teaching in the outdoor setting fully prepares children for working in the outdoors by addressing the basic psychological and physiological needs of the children before leaving the classroom

By addressing the areas of novelty that Cotton (2009) suggests are causing a negative impact on learning in the outdoor setting, teachers may be able to make the transitions to the outdoors easier for the children and the teachers to manage. When first working in the outdoor setting the teachers are almost always going to observe the children responding in the overly excited manner described by the teachers of School B. However this should diminish as evident with the children in School A. If approaching the change in children's behaviour with knowledge and awareness of the different novelty factors and an understanding of the notion of border crossing then the teachers should be able to reduce this negative impact more quickly than through repeated exposure to the setting alone.

The figure below summarises the four key characteristics that support smooth transition across the borders between the classroom and the outdoor setting.

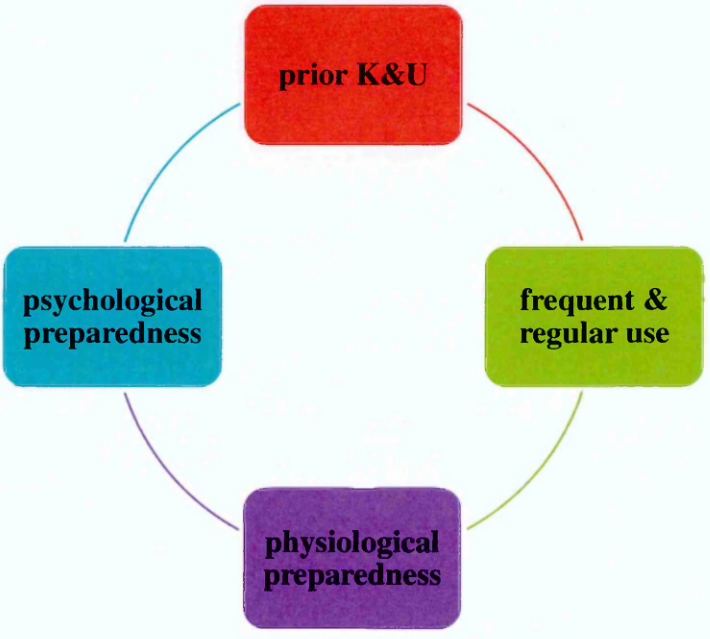


Figure 3 Factors supporting the transition across borders when moving from the classroom to the outdoor setting

5.3 Teachers' Disapproval

A seminal study undertaken by White (1975) which explored teacher disapproval rates concluded that the rate of disapproval decreased as the age of the children increased. This pattern was not reflected in either of the Schools participating in this study and the observation which noted the highest number of reprimands (8 observed in one lesson) was with the oldest year group observed in School B; I also watched a lesson where there were no incidents of children being reprimanded with the youngest group in School A. White (1975) also suggests that teachers reprimand children because it brings about a more immediate response than ignoring negative behaviour and as a result teachers themselves are "rewarded immediately in their role as a classroom manager" (*ibid*, p370). The teachers from School B described their own teacher role in the outdoor setting and were less confident in this. It is possible therefore that the uncertainty of their role and identity in the outdoor setting has an impact on how they reprimand the children. The teachers from School B recognised that the children did not respond as well to them when working in the outdoor setting. White's argument would suggest the teachers in school B are, therefore, not "rewarded" through reprimanding the children. This goes some way to explaining the points raised that the teachers felt there was greater disapproval in the outdoor setting than the classroom – it is plausible these teachers realised there were more opportunities for reprimanding the children but did not translate these into the action of disapproval.

So far this chapter has explored the transition of the classroom/outdoor setting border in terms of challenges children face in making sense of the outdoor setting. In School

A the increased rates of disapproval upon return to the classroom, accompanied by observations of the children being more distracted, noisier and less responsive, could be explained in two ways.

The first is that the teachers in School A have focussed greatly on making working in the outdoor setting the norm for these children and, as a result, have concentrated on supporting and managing the transitions to the outdoor setting from the classroom. Consequently, the need to manage the movement back into the classroom has been inadvertently neglected. The outcome of this could be that it takes the children some time to readjust to the classroom environment having had the opportunity to work in a more spacious and dynamic setting in the outdoors. As a result the transition back into the smaller confines of the traditional classroom setting demanding less physical movement and energy from the children results in an increase in the number of instances of behaviour which is not suitable for the indoor space. Many of the teachers described the outdoor setting in terms of the increased space, stimulation and engagement of the children in this setting and it is logical to assume moving away from this heightened sensory environment back to the greater confines of the classroom is more challenging for the children. Buck (1999) suggests that whenever there is a transition in, out or within a classroom the teacher needs to set clear expectations of behaviour from the children. Observations from my study noted teachers clearly explaining to children how they were to behave when leaving the classroom but no notes indicate similar directives for returning to the classroom. Thus, the teachers were supporting the transition from the classroom to the outside setting by making clear explicit expectations but this was not mirrored upon the return from the outdoors to the classroom. Cotton (1999) writes about preparedness

in order to create a more conducive state for learning in the outdoor setting and the findings from this study suggest this is also important when moving back into the classroom following teaching in the outdoor setting.

Aikenhead's studies (1997, 1999, 2001) address the need for being aware of border crossing into the science classroom and Costa (1995) writes of potential discordance and incongruence when making such transitions. Through greater preparation, these transitions can be made smoother for children although I also suggest that it is not simply the crossing of the border into the more novel environment that needs to be managed but also the return to the more familiar setting. Bernstein's theory of realisation and recognition rules suggests there are at least some differences for each of the settings the children work in. I suggest that, in part, the transition from one setting to another results in the children making a shift from one set of rules to another. There is not an immediate adjustment to walking back into the classroom, for either children or the teacher, so there is a manifestation of some 'unacceptable' behaviour which the teachers address.

The fourth characteristic of an effective outdoor setting pedagogy is that the teachers manage the transition back to the classroom as consciously as they manage the move to the outdoor setting

Based upon this analysis the fourth characteristic of an effective outdoor setting needs to be considered in combination with the third characteristic where the teacher *fully prepares children for working in the outdoors by addressing the basic*

psychological and physiological needs of the children before leaving the classroom. This then offers a wraparound approach to managing the borders to be crossed within one lesson. The purpose of this is to support the children in being able to change their behaviour and realise the shift in the 'rules' between the outdoor setting and the classroom.

A second potential contributing factor which may explain the increased disapproval instances upon returning to the classroom in School A and is appropriate for discussing the reprimanding by teachers in School B is that of there being a dominant classroom pedagogy; this is discussed more fully later in this chapter.

5.4 Behaviour Management and Changes in Relationships

The previous chapter presented differences in behaviour management approaches between the two schools participating in this study and this is very closely linked with the changes in relationships evidenced throughout the findings and so both these areas will be discussed together. Existing literature, for example Dillon *et al.* (2005) and Rickinson *et al.* (2004), comments positively on the observed changes in behaviour between children and teachers and children when working in an outdoor setting. This was reflected in the findings of this study in School A but much less so in School B. An explanation is offered here using Bernstein's work.

Both behaviour management and the interrelationship changes observed can be explained through Bernstein's notion of framing. Bernstein described his theory of classification and framing in relation to the control exercised over the content of the

lesson (classification) and the discourse (framing). McLean *et al.* (2011, p7) offer a more detailed explanation:

> Within education, the principle of classification regulates what knowledges, skills and discourses are transmitted and acquired. Framing is evident within classified categories and relays principles of control. In formal education, the principle of framing regulates how knowledge, skills, dispositions are to be transmitted and acquired … Strong framing places the control with the teacher, who makes the boundaries explicit, representing closed and authoritarian forms of control. In weak framing control is with the student (or it appears to be) and represents a more open form of control. In any educational arrangement, different aspects can be weakly or strongly framed.

Observations of teaching within both schools offered differences which can be explained through examining framing. Teachers in school B tried to maintain greater control over the interactions between themselves and the children and between the children than was observed in School A. The teachers in School A were far less concerned with managing these interactions whilst maintaining expectations that the work set for the children would be completed. The observations of and interview dialogue with the teachers in School B suggested the teachers were trying, and not necessarily succeeding, to manage interactions in the same way they did in the classroom where they would successfully exercise greater control.

The fifth characteristic of an effective pedagogy for teaching in the outdoor setting is a shift to weaker framing.

The diagram below represents the shift in framing observed in School A and School B when working in the outdoor setting. Teachers in both of the schools demonstrated

stronger framing when inside the classroom and so are located in the top right quadrant of the diagram. The teachers in School A shifted to weaker framing when teaching in the outdoor setting and those from School B exhibited control of dialogue and interactions that was at least as strong as within the classroom, possibly stronger.

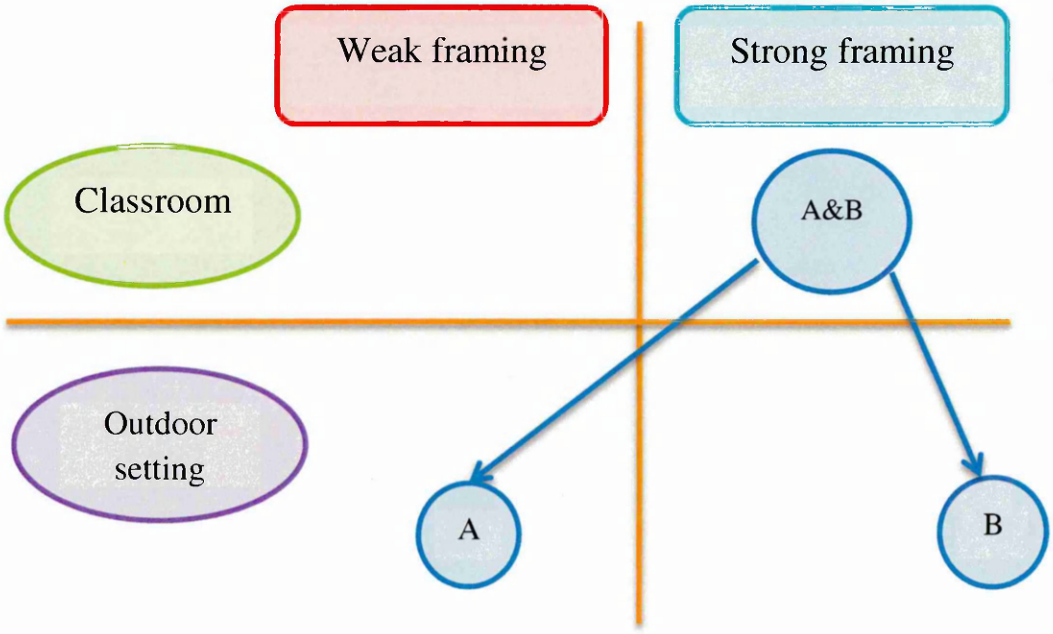


Figure 4 Shift in framing in School A and School B moving from the classroom to the outdoor setting

Such a shift in framing would allow freer dialogue between the teacher and children and between the children accepting that such off-task interactions are part of the dynamics of working in the outdoor setting but are able to enhance the teaching and learning experience rather than distract from it. Previous sections in this chapter have discussed reasons why the changes in the children's behaviour described by teachers participating in the study may have occurred. I have suggested the teachers may not be aware of the borders to be crossed and the transitions taking place when moving from the classroom to the outdoor setting and back again. The teachers in School B

attempted to manage these changes by striving for greater control through stronger framing although observations and discussion through interview suggests this practice does not support teaching and learning in the outdoor setting.

Five characteristics of an effective outdoor pedagogy have been identified based on the analysis of findings from this study. The following sections of this chapter will now consider how the teachers can move to realising this pedagogy in practice and draw upon additional theories of Shulman's PCK, Vygotsky's ZPD and MKO and the use of Johari's Window as a means of reflection and drawing upon the support of a MKO.

5.5 Dominant Classroom Approach, Planning and Assessment

The following section approaches the area of Initial Teacher Education in order to give a context for the development of what is referred to within this study as a Dominant Classroom Approach. Through Initial Teacher Education and successful completion of the Newly Qualified Teacher (NQT) programme teachers' teaching is moulded by a set of Teachers' Standards (DfE 2013) which require trainees and teachers to meet a minimum standard in order to achieve full qualification as a classroom teacher, qualified teacher status (QTS). Korthagen (2010, p99) suggests that the current model of Teacher Education creates an apprenticeship approach where teachers experience a "subtle process of enculturation shaped by … implicit norms" and the findings from this study suggest the norm is a pedagogy which is

deeply rooted in a classroom setting and one which was not as effective when adopted in the outdoor setting.

This study has explored the notion that there are a number of shifts in terms of the children's behaviour and the challenges teachers face when moving from teaching inside the classroom to the outdoor setting and suggests the teachers' approaches to teaching also need to change in order to meet the demands placed upon them in an alternative setting. The teachers in School B discussed their relative comfort of being in the classroom compared with the outdoor setting and their struggle with how the use of classroom-based practice for planning, assessment and behaviour management was much less successful in the outdoor setting. In the earlier section of this chapter discussing possible explanations for the observed changes in the teachers' use of disapproval based on analysis and findings suggested one possible reason for this may be related to the existence of a dominant classroom pedagogy. There was an observed increase in teacher disapproval rates upon returning to the classroom from the outdoor setting in School A. One suggestion is that this was a result of the challenge the children faced in making the transition back to the inside classroom. However, it is also possible the teachers were defaulting to a dominant classroom pedagogy which was embedded in their practice prior to the changes seen in more recent years with the increased use of the outdoor setting. Although their pedagogy and practice were actively challenged through planning for activities undertaken in the outdoor setting, it is plausible that the pedagogy established through their Initial Teacher Education and formative teaching years was so embedded that on return to the context of the classroom this was adopted by the teachers. This notion of shifting pedagogy and different approaches for different settings can be further explored

through existing literature on PCK and extending this to the outdoor setting specifically.

5.6 Pedagogical Content Knowledge (PCK) and the Outdoor Setting

Shulman (1986) proposed there was a false dichotomy between subject knowledge and pedagogy and these needed to be brought together to impact on how the content was best taught and so the term Pedagogical Content Knowledge was introduced. A number of recent studies have developed this term to address changes in teaching methods commonly experienced in school. For example, Graham (2011) and Chai *et al.* (2013) have written about the inclusion of technology in the context of PCK as a result of the increased use of computers and technological devices within the classroom setting. Consequently the term TPCK (Technological Pedagogical Content Knowledge) has become more commonplace. There have been various definitions and changes in emphasis since Shulman's conception of PCK as Park *et al.* (2010) describe:

> Carter (1990) asserted that PCK is what teachers know about their subject matter and how they transform that knowledge into classroom curricular events. Cochran *et al.* (1993) defined PCK as "the manner in which teachers relate their pedagogical knowledge to their subject matter knowledge in the school context, for the teaching of specific students" (p1).

Both of these definitions refer to the translation of subject knowledge into the classroom and school contexts. Beames *et al.* (2012) suggest the context of where a lesson is taught is significant. Different contexts demand consideration of *how* the

content is delivered to the children and place even greater pedagogical demands upon the teacher when this teaching is beyond the classroom. They state that teachers make use of theoretical underpinning to support their teaching within the classroom supporting the notion of the existence of classroom specific pedagogy. In the same manner the term PCK has been extended to specifically addressing teaching with enhanced technological support the findings from this study suggest there is the opportunity to extend the term to specifically focus upon teaching in the outdoor setting – OSPCK.

5.6.1 Challenging Existing Pedagogy - Bernstein's Rules

A move to a specific outdoor pedagogy would require teachers to challenge their own classroom pedagogy and the approach to doing this in reality is potentially very complex. As has been discussed already there are some consequences for teachers teaching in the outdoor setting which mirror the changes the children experience. Although in this study the teachers were more familiar with spending time in the outdoors than the children they taught it has been suggested there is a pedagogical transition that needs to take place in order to firstly support the children across the boundaries they face and secondly for the teachers to be able to teach more effectively in this setting. Chien and Wallace (2004) suggest that teachers need to be cognisant of the recognition and realisation rules for reasons that are twofold. Firstly, by not engaging with these rules from their own, and from the children's, perspectives they "may have a completely different perception of what is happening within the [school] culture thus leading to misperceptions or misunderstandings" (*ibid* p2). This moves some way to explaining the teacher actions in School B where

they see the children as misbehaving and being disengaged with their learning when in the outdoor setting. The perception of the children's poorer behaviour is very real for the teachers as they experience the giddiness and buoyancy of the class who are immersed in the outdoor setting without an understanding of the rules to which they are meant to adhere. By exploring these rules from the children's perspective more fully it may lead to a greater understanding of why they are behaving as they do and how to manage this without employing the classroom strategies that unsuccessfully transfer to this setting. The second reason for the teachers engaging fully with these rules is that "a heightened awareness of the school culture and teachers' realisation rules would assist teachers dealing with students from different backgrounds" (*ibid*, p2). This can be extended to enable teachers to support the children from the backgrounds Costa (1995) describes in the different settings (cultures) they experience within the classroom and in the outside setting.

5.6.2 Challenging Existing Pedagogy - Reflection

This study claims that for teachers to enhance their conscious awareness of the borders and challenges they, and the children, face when moving to the outdoor setting requires determined and active engagement with reflection. There are many models of reflection which have been used within education for example Gibbs' (1998), Johns' (2006) and Schön (1991) although for this study Luft and Ingham's (1955) model is used to demonstrate how reflection can become an active process and support teacher's developing their pedagogy for working in the outdoor setting. What has emerged as significant from this study is that the teachers may not be

consciously aware of such as the boundaries between the classroom, the recognition and realisation rules of different settings and the existence of a dominant classroom pedagogy. To reflect upon something they are unaware of is challenging and so the Johari Window can be used to support the reflective process by making explicit aspects of an individuals' character that are either known or unknown to themselves or others. Its application, as opposed to other models of reflection, has been favoured because of the role others can play in the reflection process which, as this chapter explores in more detail, is a key outcome of this study.

	Known to self	Not known to self
Known to others	OPEN	BLIND SPOT
Not known to others	HIDDEN	UNKNOWN

Figure 5 Johari's Window
Taken from Luft and Ingham (1955)

Each of the quadrants within the Johari Window is relevant to reflecting upon pedagogy. There are aspects of the teachers' practice the teacher is consciously aware of and these are open for others to see such as their use of the behaviour policy in school or their subject knowledge conveyed within a lesson. A teacher may be aware of a lack of confidence or enthusiasm for teaching a particular subject, or teaching in the outdoor setting, and they keep this characteristic hidden from the class and other colleagues. This could apply to the teachers in School B who had little confidence when teaching in the outdoor setting. Blind spots in their teaching may be evident to others through observation such as the increased teacher

disapproval seen upon the return to the classroom in this study in School A or the lack of stringency after establishing behavioural expectations in School B. The greatest challenge, and perhaps the most significant in this study, is the identification of the unknowns as the teacher is not cognisant of these and they are not observable. Many applications of Johari's window are in a business context as a means of ensuring individuals' potentials are realised however the same process can be used to encourage teachers to reflect upon aspects of their teaching they and others were previously unaware of.

The purpose of engaging with an activity such as that modelled in the Johari Window is to become aware of the unknowns and to be able to utilise these to improve teaching. The model below outlines how movement between the different quadrants of the window can be achieved.

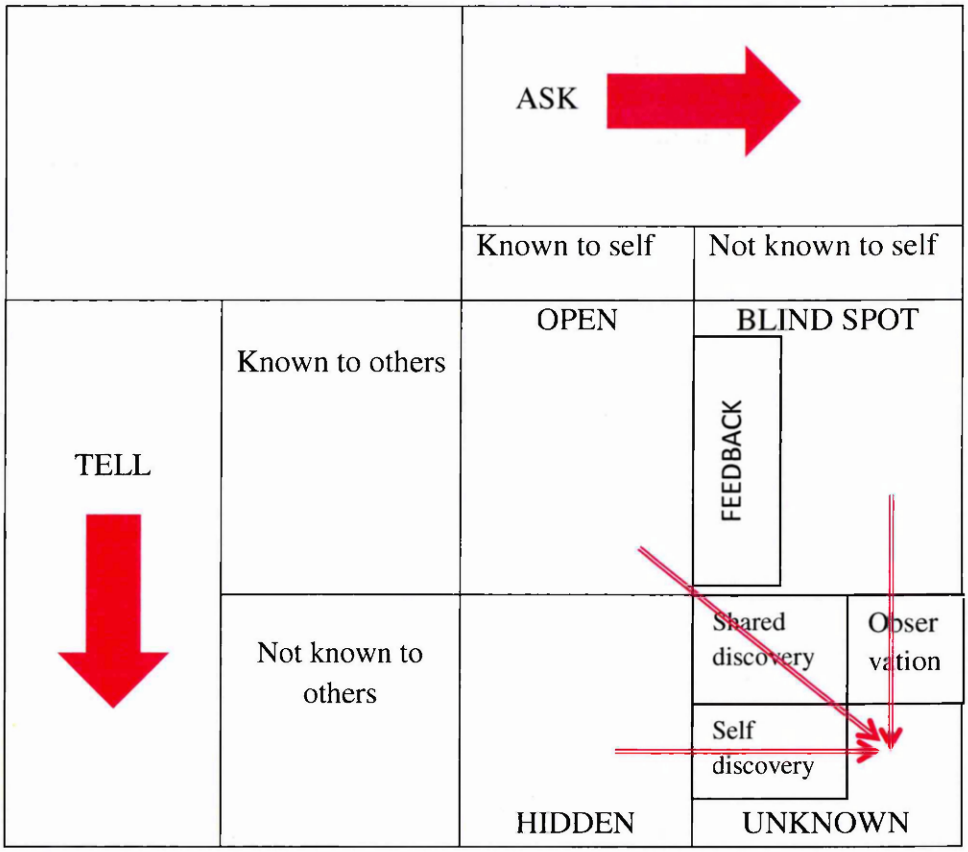


Figure 6 The use of others to support movement through the Johari's Window model
Adapted from Leading with Trust (2011)

The role others play though observation and discussion in the process outlined above is key; this links to the following section which addresses teacher confidence, CPD and Teacher Support. The benefits of exploring and trying to unpick aspects of pedagogy located in the Blind Spot or Unknown areas is that, is through their identification, they are then brought to consciousness and can then be explored through the use of a reflective cycle model. Chien and Wallace (2004) and Tan (2011) both advocate that for teachers to develop pedagogically they need to be cognisant of the aspects which influence their pedagogy. This study suggests that with teaching in the outdoor setting a number of these aspects are found to be Blind Spots or Unknowns. Through addressing these teachers will be able to plan more

effectively for their teaching in the outdoor setting to encompass many more facets of teaching such as the extent to which they need to modify their typical classroom pedagogy in terms of framing, how they manage behaviour in order to focus upon learning and subsequently how the learning can be assessed.

5.7 The More Knowledgeable Other (MKO) – Moving to Operationalising an Effective Outdoor Setting Pedagogy

Through the interviews with the teachers in the study the importance of having someone more experienced or knowledgeable to discuss teaching in the outdoor setting with was raised in both schools. The following section will offer an explanation of why the role of a More Knowledgeable Other is paramount in developing pedagogical approaches.

5.7.1 Confidence, Continuing Professional Development (CPD) and Teacher Support

Throughout the observations in this study there were no indications teachers in either school felt less confident when teaching in the outdoor setting in terms of their outward communication with the children. However, there were marked differences between the approaches to teaching between the teachers in School A and those in School B which have been described and discussed throughout this and the previous chapter. As interviews unfolded with the teachers in School A they described their journeys from lacking in confidence to becoming far more confident with experience

and support when teaching in the outdoor setting. The teachers of School B were open and honest about feeling less confident outside the classroom. One explanation for there being no observable indicators is that the teachers were able to outwardly portray confidence when they were not feeling it. Barney and Pilmer (2013, p83) write of the teacher as an actor and suggest "teacher limitations can have a profoundly deleterious impact on student learning. If teachers lack enthusiasm or have a negative attitude it will be clear in their teaching". The findings from this study suggest the teachers were able to manage their lack of confidence such that it can be described as one of the Hidden characteristics explained through the Johari Window (Luft and Inhgam 1955).

Earlier discussion suggested advances in technology required the concept of PCK to evolve to include this and become TPCK; in their paper, Ertmer and Ottenbreit-Leftwich (2010), suggest that teacher confidence is supported by developing specific pedagogies. In the context of using technology within the classroom they state:

> To use technology to support meaningful student learning, teachers need additional knowledge of the content they are required to teach, the pedagogical methods that facilitate student learning, and the specific ways in which technology can support those methods (*ibid*, p260)

They also encourage teachers to "expand their knowledge of pedagogical practices across multiple aspects of the planning, implementation and evaluation processes" (Ertmer and Ottenbreit-Leftwich 2010, p261). The suggestions made throughout this chapter as to the characteristics of an effective pedagogy for teaching in the outdoor setting mirror the conclusions from research of the relevant literature.

Although teacher confidence is complex and is shaped by individuals in terms of their personalities and experiences the findings and discussions from this study suggest confidence in teaching in the outdoor setting is able to be increased through addressing the pedagogical issues raised throughout the work. The findings from this work indicate confidence could be improved through adopting and implementing the characteristics of an effective outdoor pedagogy.

5.7.2 Effecting Teacher Change

By recognising and realising the different rules (Bernstein 1980) which exist between the classroom and the outdoor setting for both the children and the teachers themselves, teachers should be able to address issues of behaviour management and reaction to novelty which were presented as significant contributors to lack of confidence by the teachers of School B. In doing so the teachers will be able to manage the transitions between settings and support the children in making the transitions harmonious as described by Aikenhead (1999) and Costa (1995). Managing each of the transitions between settings as well as the physical and psychological demands the different settings place on the children and the teachers should reduce the instances of teacher disapproval by ensuring preparedness Cotton (2009) describes in her work. There are a number of studies over a significant period of time (for example, Lortie, 1975 and Guskey 2002) indicating teachers are reluctant to change their practice as there is a fear of failure. Guskey presents a model of teacher change and indicates that one of the key factors in change being successful is the frequency with which outcomes are achieved. This supports the

findings from this study on two levels: firstly, the requirement for teaching in the outside setting to be a frequent occurrence and secondly as support for adopting different pedagogical approaches. Guskey (2002, p383) states "improvements typically result from changes teachers have made in classroom practices – a new instructional approach, the use of new materials or curricula, or simply a modification in teaching procedures". I suggest these changes will effect similar positive changes in the context of teaching in the outdoor setting. Guskey links teacher beliefs with successful changes and this supports the findings from this study in terms of developing greater confidence when teaching in the outdoor setting.

Reflecting upon pedagogical approaches however is key to teachers moving towards being more effective when teaching in the outdoor setting. Through a shift to weaker framing (Bernstein 1980) enabling different communicative practices outside and challenging an embedded dominant classroom approach teachers in School A were able to focus on the children's learning in the outdoor setting rather than focus on perceived negative behaviours observed in School B. The support of teachers more experienced in using the outdoor setting, as well as a commitment from the SLT of the school to developing its use, were identified as being particularly effective at increasing the confidence of the teachers in School A. Vygotsky's concept of a More Knowledgeable Other appeared to play a key role in supporting the teachers of School A in developing their confidence and such a role was described by the teachers of School B as missing in their professional setting. Although there are other models which develop teacher professional development (coaching and mentoring, for example) the findings of this study lead to the concepts of ZPD and

MKO as a credible explanation for differences in the pedagogical approaches of the teachers observed in the two schools.

5.7.3 Zone of Proximal Development (ZPD) and the More Knowledgeable Other (MKO)

The teachers of School A described increased confidence as they became more experienced with teaching in the outdoor setting. They gained this confidence as they spent more time teaching in the outdoor setting and worked with more experienced others. One plausible explanation of the changes identified is through the use of the concept Vygotsky described as the Zone of Proximal Development (ZPD) (Figure 7). Based on the social constructivist principle that a learner has a greater capacity to develop further knowledge or skills with the support of a more knowledgeable other than when learning alone, the teachers from School A who have dedicated and specialist support, have developed greater confidence as a result of the lead from the Outdoor Learning Coordinator (OLC).

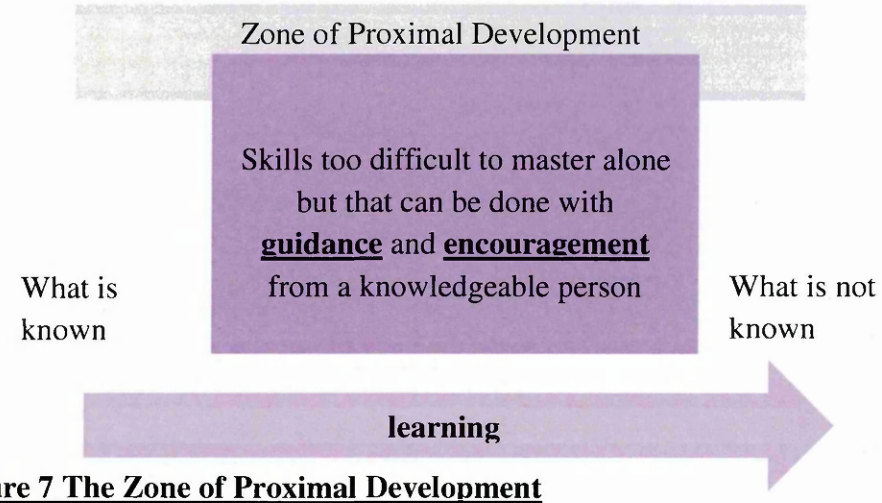


Figure 7 The Zone of Proximal Development
Adapted from Explorable.com

The impact however extends beyond confidence; it also resulted in the teachers in School A exhibiting different pedagogical traits to the teachers in School B when teaching in the outdoor setting. Indeed the notion of ZPD has been applied in the context of the teacher as a learner rather than the child. Warford (2011) suggests strongly that there is a place for the Zone of Proximal *Teacher* Development. Embedded in a context of teacher education he states the Vygoskian principles should support teachers through

> conversation that places teachers' prior experiences as learners and often tacit beliefs about pedagogy into conversation with pedagogical content (Warford 2011, p253)

Fani and Ghaemi (2011) consider the implications of ZPTD within the teaching profession and make four salient points with respect to the contexts of the schools participating in this study. Firstly, they describe the impact of peers and mentors on the development of teachers stating "the idea that teachers do benefit from the encouragement and support of their collaborative colleagues and coaches is widely accepted" (*ibid*, p1152). This is evidenced in School A where many of the teacher

participants and indeed the SLT commended the support of the OLC as key to their own development in teaching in the outdoor setting. A second factor affecting a teacher's ZPTD is the context in which the teacher is working. The teachers in School A have become immersed in a school where teaching in the outdoor setting is a norm as opposed to School B where the aspirations of teaching outside as a key element of their underpinning philosophy is not realised. Fani and Ghaemi (2011, p1152) state that

> one factor to narrow teachers' ZPD and restrict their personal choices, goal setting and activities is compliance with the norms prescribed and imposed by the local school or institution the teachers work in.

They go on to describe two further constraints upon a teacher's ZPD. The first of these is the resources the teacher has available and their understanding of how to use these, citing technology as a tool for promoting development. However, one of the issues arising from the teachers, particularly in School B, was their uncertainty with using resources in the outdoor setting. The teachers of School A highlighted the need to think differently and use resources imaginatively but again this was supported through the experience of Vygotsky's more knowledgeable other – this person being absent from School B. Fani and Ghaemi (2011, p1152) also suggest the wider school contexts are key with the microclimate of the classroom being influenced by the "outside forces which originate in social, economic, political or educational policies". The literature review has offered an historic account of the place of the outdoor setting in educational reform and initiatives and this study has demonstrated in two schools the extent to which these policies have influenced the level of engagement with working outside. In addition, the teachers have alluded to the cultural and social backgrounds of the children negatively impacting upon the range

of experiences the children have of being in the outdoors. Both points support Fani and Ghaemi's claims that the relationship of developing ZPD goes beyond simply the activities within the school itself.

5.7.4 Teacher Readiness and Maintaining a More Knowledgeable Other

The previous section relates to the comments made by the Deputy Headteacher of School A and her discussion around teacher readiness for the outdoor setting. It prompted the question of how do teachers develop in order to become "ready" for teaching in the outdoor setting and subsequently supporting the children's learning in it? It is possible that the role of a more knowledgeable other allowed School A teachers to become more aware of some of the unknowns and blind spots described in Johari's window (Luft and Ingham 1955) and as a result develop their pedagogy for teaching more effectively in the outdoor setting. The teacher in the classroom usually assumes the role of the MKO supporting the children's learning although it has become accepted through collaborative approaches that peers can also act in this role (Harris 2012). Cicconi (2014) has gone as far as to suggest that the internet and technology can assume this role. In this study the MKO is someone who has greater experience of working in the outdoors (such as the OLC in School A) who can support the teachers in their teaching in this setting. By accepting the notion of ZPD and achievement through social interaction and support there is a need to maintain training and furthering knowledge and expertise not only of the teachers who strive to develop their teaching but also of the MKO. The SLT and teachers in School A described a significant financial investment in developing staff training in relation to teaching in the outdoor setting. In addition to targeting practical aspects of this they

were also constructing research bids with a local university to undertake studies into the most effective ways the school grounds could be used and their knowledge shared with the local community and other local schools.

If these teachers, and those in School B, were to engage fully with the theories which underpin the changes in children's and teachers' behaviour when working in the outdoor setting then the growth in their pedagogical development for teaching in the outdoor setting will arguably be greater than through consideration of practice alone. Beycioglu *et al.* (2010) describe an existing issue in the perceptions held by teachers about the value of educational research. They summarise a number of descriptions of educational research taken from existing studies:

> Woods (1986) claimed that "teaching and educational research do not have a happy association. To many teachers much educational research appears irrelevant" (p. 1). Joram (2007) found that teachers "believed that educational researchers lack credibility because they are divorced from the real work of teaching, and that research is inaccessible to them because of the overly technical format in which it is presented" (p. 124). Hammersley (2008) labels this as teachers' perceptions "about the roles that research *has actually played*, theoretical questions about the roles that it *can* play, and value questions about the roles that it *ought to* play". (p1)

These views are supported by many studies, for example McIntyre (2006), Korthagen (2008) and Cheng *et al.* (2010), which present another barrier in developing teacher pedagogy further in relation to how teachers can be encouraged to engage and see greater relevance in studies based upon theoretical frameworks and research. A study by Vanderlinde and van Braak (2013, p302) identified four gaps between theory and practice:

- 1. Educational research yields few conclusive results; or educational research does not provide valid and reliable results that are confirmed through unambiguous and powerful evidence.
- 2. Educational research yields few practical results; or educational research is limited in practical use.
- 3. Practitioners believe that educational research is not conclusive or practical; or educational research is not meaningful for teachers.
- 4. Practitioners make little (appropriate) use of educational research; or practitioners do not have the skills to use educational research results.

They further state:

> We believe that more cooperation between researchers and practitioners is inextricably linked with rethinking how the dissemination of research knowledge occurs. This is also the case for practitioner research which produces context-specific knowledge, which is located in the individuals themselves and their practice (*ibid*, p303)

The example of the SLT and teachers from School A beginning to engage with researchers suggests that in part they value the role of academic research in improving practice and therefore may be closing the gaps Vanderlinde and van Braak describe. The practitioners were the central focus of this study and were integral in identifying the observable differences in pedagogy between the teachers in the participating schools. The theories which underpin this study are steeped in the practice of the teachers and this should ensure the relevance of the study to teachers as a means of potentially developing their pedagogical repertoire for teaching in the outdoor setting.

This chapter has presented five characteristics of effective pedagogy for teaching in the outdoor setting and related these theories which provide the steps to changing the characteristics from theory to practice. The first four characteristics support transitions across the boundaries between the classroom and the outdoor setting (and *vice versa*) and the fifth suggests weaker framing is more effective in the outdoor setting. The role of the More Knowledgeable Other has formed a prominent part of this discussion and has become central to effecting changes in pedagogical approaches. A summary of this is presented in the figure below.

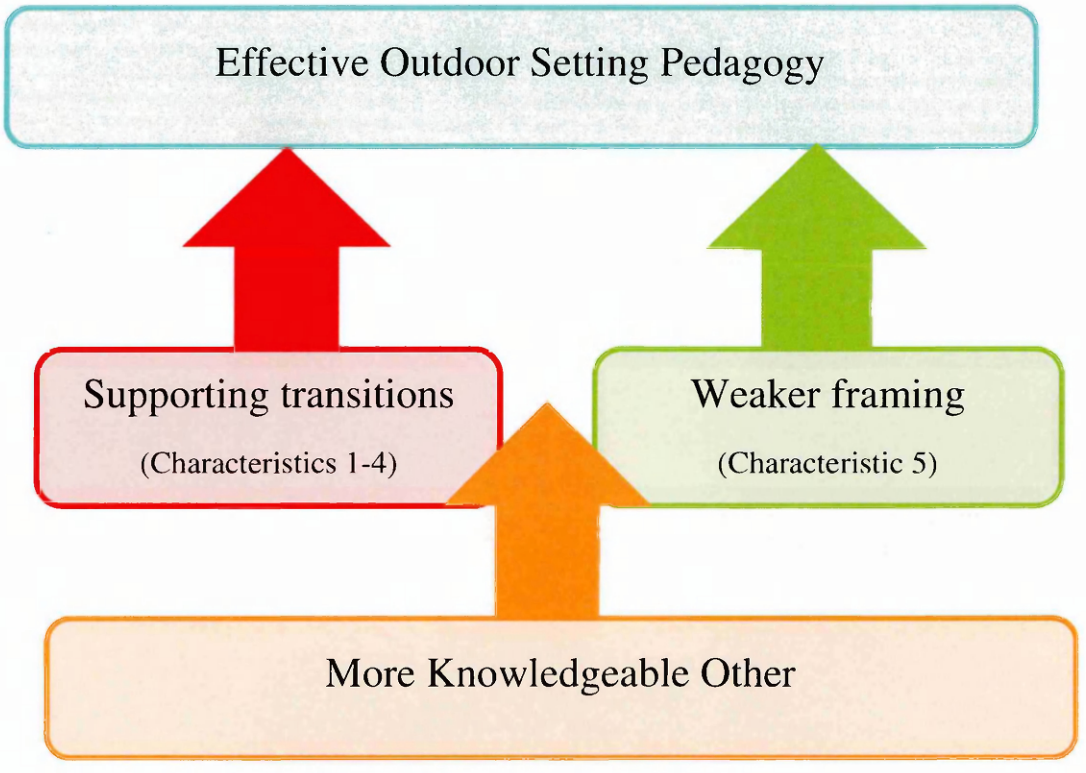


Figure 8 Model of the Discussion of Findings and Characteristics

The final chapter of this thesis will explore how the findings of this study can impact upon existing teachers' practice and influence their pedagogy and draw together the conclusions of the study in response to the research questions. Opportunities for further study will also be highlighted.

Chapter 6

Conclusions and Implications for Practice

This chapter will begin by summarising the findings and discussions as a response to both research questions posed at the beginning of this study and then consider the implications of these findings for future practice. It will also offer a section which highlights potential avenues for further study arising as a result of this work. The chapter will conclude with some critical reflections of the study and its methodology.

6.1 Response to the Research Questions and Contribution to Knowledge

The research questions this study addressed were:

Research Question 1: What are the distinctive features of effective pedagogy for teaching in the outdoor setting?

Research Question 2: What are teachers' perceptions of teaching in the outdoor setting?

The methods adopted throughout the study allowed these questions to be explored and the previous two chapters have described, discussed and analysed the findings in the context of existing literature and how the framework for an effective outdoor setting pedagogy can be realised in the primary school setting through the use of reflection and support from a More Knowledgeable Other.

6.1.1. Research Question 1

Rickinson *et al.* (2004) indicated there was a gap in the way teachers planned their teaching in the outdoor setting and suggested the emphasis was drawn away from learning. The Literature Review (Chapter 2) outlines a general lack of focus on teachers' pedagogy when teaching in the outdoors and it is this which informed the first research question. The comparison between Schools A and B allowed the nuances and manifestations of different pedagogical approaches in the outdoor setting to be observed and these gave rise to the characteristics identified as an effective pedagogy as presented in Chapter 5.

The five characteristics of an effective outdoor pedagogy are outlined below. It is a key emphasis of these findings that they are underpinned by the principle that there are no great shifts and radical amendments to the teachers' teaching proposed. The emphasis lies with the teachers having a greater awareness of the borders to be crossed, from their own and the children's perspectives, and being cognisant of the transitions between the classroom and the outdoor setting (which Tan (2011) suggests is necessary between different cultures):

- *support children in making the transitions from within the classroom to beyond it*
- *both regular and frequent use of the outdoor setting*
- *prepare children for working in the outdoors by addressing the basic psychological and physiological needs of the children before leaving the classroom*
- *teachers manage the transition back to the classroom as consciously as the move to the outdoor setting*
- *a shift to weaker framing*

The characteristics offer an achievable framework for an effective outdoor setting pedagogy. The emergent framework from this study is, at least in part, about teachers recognising what is already happening-and responding to this.

The Discussion chapter outlined the use of Vygotsky's work to offer an explanation of how the characteristics could be operationalised. From the outset this current study was embedded in Aikenhead's, Shulman's and Bernstein's theories; however, the application of Vygotksy's Zone of Proximal (*Teacher*) Development, More Knowledgeable Other and Luft and Ingham's Johari's Window emerged as theories which are better able to support and offer explanations for the findings. This does not mean to suggest they are the only plausible explanations for this study's findings but they are consistent with the social-constructivist platform for the work and indicate the role of a MKO as key to supporting teacher development – something which was highlighted with some consistency by the teachers from both schools. Teachers from School A (and the school's leadership team) spoke extensively of the support they were offered by the Outdoor Learning Coordinator and the value of having someone show them what could be done and how to approach doing it. The teachers from School B suggested one significant factor that would make the biggest difference to them working in the outdoor setting was having someone who could support them with ideas of what to do and how they could do it. This is discussed further in the following section addressing the second research question.

The application of the ZPD and MKO to the teachers' teaching is one area where this study has made a contribution to existing knowledge. It contributes to the existing

body of knowledge and attempts to fill an identified gap as exposed in Chapter 2 and through studies such as Rickinson *et al.*'s (2004). Although Warford (2011) has indicated there is a place for ZPD in teacher development, particularly within Initial Teacher Education, this notion has been applied in this study to experienced teachers and specifically supporting a change in their pedagogical approaches to teaching in the outdoor setting and challenging a classroom dominated pedagogical approach.

The five characteristics are presented as outcomes from this study; this does not suggest they form an exhaustive characterisation of effective outdoor pedagogy. The settings of the different schools allowed for comparisons and contrasts to emerge and there should be some acknowledgement of this study involving only two schools. The Methodology chapter offers some discussion around generalisability of findings and while there are potential applications of this framework beyond the two schools involved in this study– discussed in a later section of this chapter - it does not claim that the approaches outlined will work in every school. However, this study was designed with and supported by established theories which have been extended and modified to the context of the outdoor setting. This adds gravitas to the findings of this work and supports the study in terms of its contribution to theory development (Eisenhardt 1989) as outlined in the Literature Review.

The following section will consider the second Research Question and draw conclusions around the teachers' perceptions of teaching in the outdoor setting.

6.1.2. Research Question 2

All the teachers involved in the study offered a view that teaching in an outdoor setting was worthwhile and beneficial for the children. This response was, in many ways, predictable and mirrored much of the existing literature which indicates children enjoy and are enthused by working outside. However, despite articulating how beneficial working in the outdoor setting could be, the teachers in School B voiced concerns about teaching in the outdoor setting. These stemmed mainly from a lack of confidence in tackling and dealing with the children's behaviour and over-excited responses to working in this setting.

The findings of this study highlighted that the teachers from School B felt tensions between wanting to teach in the outdoor setting, recognising the potential benefits, and lacking in the confidence and skills to facilitate what they believed was a successful lesson. They found behaviour management strategies were ineffective and their perception was then of a challenge to maintain the children's focus on the learning goals. The issues around behaviour management were discussed in Chapter 5 and aligned with the teachers increasingly adopting classroom-based strategies which were not as effective in the outdoor setting. The need to challenge a dominant classroom-based pedagogy has already been suggested as a key to improving teaching in the outdoor setting.

The perceptions the teachers within School B held were of constantly reprimanding the children and trying to sustain the order and focus of attention on tasks that they would expect to see within the classroom setting. This was explained, in part, through discussion of the impact of Novelty as the catalyst for changes in the children's behaviour and also informed the second characteristic of an effective outdoor setting pedagogy (frequent and regular use of the outdoor setting). The teachers from School A advocated that increased use of the outdoor setting resulted in a reduction in the "giddiness" described by the teachers in School A. The Discussion of Findings chapter elaborated on the children moving towards adopting what Bernstein referred to as Recognition and Realisation rules. Aikenhead (with support from Costa's work) described this situation as the children being able to make smooth transitions from the cultures of the classroom to the outdoor setting.

The observations of the teachers noted the frequency with which children were reprimanded and this contrasted with the teachers' perceptions of what they thought was happening. In School A the teachers suggested there was little or no difference and in School B it was suggested children were reprimanded more in the outdoor setting. This study found the teachers in School A increased their reprimand of the children on return to the classroom from outside – possible explanations presented for this were the children reacting to the transition back to the classroom culture from the outdoor setting (influencing characteristic four of an effective outdoor setting pedagogy) and also the teachers defaulting to the dominant classroom pedagogy described in the Discussion chapter. The observations of the teachers in School B, who suggested they reprimanded the children more in the outdoor setting, indicated that they were more likely to admonish the children within the classroom.

White (1975) indicated that teachers reprimand children when they are aware the reproach is most likely to be successful as this serves as a positive feedback mechanism for the teacher. It is possible, therefore, that as the teachers were sensitive to the lack of success with their use of classroom behaviour management strategies they (unconsciously) refrained from chastising the children. These findings supported the indication that a dominant classroom pedagogy may exist.

Interviews with the teachers in School A indicated they were confident, or had grown in confidence, with continued use of the outdoor setting and the direction from their Outdoor Learning Coordinator. Complementing these views were the findings from the teachers in School B who indicated the support from a more experienced or informed person within the school would have a positive impact upon their willingness to work in the outdoor setting. These perceptions influenced the discussion around the role of a MKO in developing pedagogy for the outdoor setting; a theory which developed a central role in the outcomes of this study. One of the main conclusions of this study is the proposition that a MKO can make a significant difference to the development of teachers' outdoor setting pedagogy and this underpins the evolution of the five characteristics stated in the previous section from the framework to being effected within teaching.

In addition to encouragement from a specific individual within the school, within School A the wider support from the SLT was evident – the staff were able and encouraged to spend significant time in the outdoor setting (one teacher, A1, taught outside for a full week in the summer term, 2013). The school staff (including the

SLT) expressed very clear intentions as far as developing teaching in the outdoor setting was concerned. There was an investment in terms of time and finances in order to further the use of the school grounds for teaching. The interview with the Headteacher in School B was presented in the Findings chapter as she also expressed her support for teaching in the outdoor setting. However, through the duration of the interview it became apparent to her that the support for staff and the actual use of the school grounds were not as extensive as she had initially supposed – she acknowledged the need to address this in order to enhance the outdoor teaching within the school. Accomplishing relevant school policy aims and policies would appear to be more effective when there is a whole school commitment to the use of the outdoor setting.

Although I have stated that the characteristics for an effective pedagogy are quite straightforward in themselves, enabling the teachers to achieve them is more complex as the previous chapter suggests. The discussion with the Headteacher of School B highlighted that having a policy of using the outdoor setting was not enough to generate a positive teaching and learning setting and the teachers from School A suggested the transition to confidently teaching in the outdoors took time and some perseverance.

The next section of this chapter will now outline how this framework for effective outdoor setting pedagogy could impact on practice before indicating areas for further study.

6.2 Implications for Practice

This section will consider areas of education where the characteristics of effective outdoor setting pedagogy emerging from this study could be used to enhance teaching and learning. It will initially suggest how existing primary age phase teachers could benefit before considering its application in a secondary science setting for both in- and pre-service teachers and then extend this further to the wider application to any visit off-site undertaken by school children and their teachers.

The Council for Learning Outside the Classroom (CLOtC 2015) states:

> Learning outside the classroom is not an addition to the curriculum but should become integral to it and a regular part of teaching and learning. To make sure that happens, it is important to build learning outside the classroom into the development of schemes of work and into curriculum planning at every stage.

This is supportive of the National Curriculum (DfE 2013) which contains many statements suggesting that the use of the outdoors is key to its effective delivery. Examples can be drawn from across the range of subjects throughout Key Stages 1 to 4. The introduction to the National Curriculum for Science states "teachers will wish to use different contexts to maximise their pupils' engagement with and motivation to study science" (DfE 2014, p169) and identifies specifically where children should be taken into the outdoor setting to study areas such as habitats and living things; for example:

> Pupils should use the local environment throughout the year to explore and answer questions about plants growing in their habitat (DfE 2014, p159)
>
> Pupils should use the local environment throughout the year to explore and answer questions about animals in their habitat (DfE 2014, p160)

The Science Community Representing Education (SCORE) also published guidance for school teachers describing the outdoor space as a resource to be used to support teaching and learning and identifying examples how this could be related to the curriculum (SCORE 2013). This and the National Curriculum are consistent with the policies and guidance outlined in the first chapter of this thesis which indicated learning outside has been, and remains, on the political agenda. Although encouraging the use of the outdoor setting as a location for teaching and learning there is nothing documented in these publications about developing pedagogical approaches in order to support the activities taking place. With this is mind it is reasonable to suggest the characteristics of an effective pedagogy outlined in this thesis, and the means of effecting these, have the potential to support teachers in developing teaching approaches which are best suited to learning in that setting. Through CPD events, as undertaken by School A, and the support from a nominated and experienced person within the school, it is possible that existing teachers' teaching could be developed and improved as a result of adopting the strategies identified in this study.

Although this study focussed on a primary age phase the potential applications of this framework of characteristics of an effective outdoor pedagogy could be

extended beyond this to other age groups – and potentially teaching in any outdoor - based setting with any age group. The Field Studies Council and Association for Science highlighted the inclusion of fieldwork within the Teachers' Standards (DfES 2007) but also indicate there is a lack of support for developing specific pedagogy for working in this setting.

> The use of fieldwork is clearly a key part of the subject pedagogy associated with the teaching of science. However, at present there is no guidance and exemplification issued by TDA to support this and the training needed to meet these standards is open to wide interpretation. This is unlikely, in itself, to promote an increased level of fieldwork training and development in ITE. (FSC and ASE 2007, p3)

The last point made in the quotation above suggests providers of Initial Teacher Education are unlikely to support trainee teachers in developing their pedagogical approaches beyond those used within the classroom setting. The discussion chapter presented Korthagen's (2010) views that ITE mould trainee teachers to a classroom focussed way of teaching which suggests in the three years between these publications little had changed. It is possible that the characteristics of effective pedagogy in the outdoor setting could be used, initially in a science setting to support fieldwork, within Initial Teacher Education and therefore attempt to open the possibilities of extending PCK to Outdoor Setting PCK at the very formative stage of teaching. As with CPD events and the identification of a MKO in the primary age phase, existing secondary school teachers may also benefit from engaging with reflecting upon teaching in the outdoor setting and developing a wider pedagogical repertoire most suited to the teaching environment. The Field Studies Council and Association for Science Education report suggested nine recommendations for improving teaching of science in the outdoors, one of which was to "make full use of

the subject pedagogy associated with the effective teaching of science" (FCS and ASE 2007, p17) and the findings from this study are able to support this.

Widening the application of this framework to beyond the immediate curriculum, it is possible that teachers undertaking off-site educational visits could benefit from adopting some of the characteristics of effective pedagogy identified within this study. The Learning Outside the Classroom manifesto (DfES 2006) encourages visits beyond the school grounds to locations such as local farms, supermarkets and further afield, to include rural settings and residential experiences. If the novelty of working in the immediate school grounds presents challenges for some teachers and children it is reasonable to extrapolate to potential challenges of a residential activity weekend or rural farm visit. Characteristics 1, 3, 4 and 5 are particularly applicable in this situation and by adopting a pedagogical approach which enables the children to make greater sense of the new environment upon arrival arguably means they will be able to respond more positively to it. Cotton's (2009, p171) study highlights some of the challenges for her students when undertaking an overseas trip stating:

> exposure to new experiences is an important part of an overseas field trip – and its influence on the ability of students to engage in learning in the field should not be underestimated ... some students enjoying the social opportunities and others finding it difficult to adjust to being away from home and finding the social pressures stressful.

She indicates that while preparation can alleviate many of the concerns it will never eliminate them entirely for those involved in the trip. This supports characteristic 3 of the effective outdoor setting pedagogy and is something that may support teachers and therefore children when undertaking off-site visits. Her study also focussed on

undergraduate university students which again supports the idea of these characteristics being applicable to learners in a range of age phases.

Peacock and Pratt (2011) presented findings from a study observing learning in out-of-school settings. They state, for the purpose of their article, that "all forms of non-school settings, including botanical gardens, environmental centres, nature reserves, museums, science centres, exploratoria, etc., are referred to as Learning Spaces" (*ibid*, p12). They suggest that teachers experience changes in their role when undertaking such visits explaining "visiting teachers and other adult helpers perceive their roles in varied and different ways, from management of behaviour to mediation of cognitive messages" (*ibid*, p13). Although they highlight the shift in teacher role (and they also focus on the differences for children in these learning spaces) Peacock and Pratt do not address the area of pedagogy for informal settings. They do, however, draw upon the notion of Border Crossing (Aikenhead 1996, 1999, 2001) as a theoretical framework for their study and therefore the pedagogical shifts suggested through this work when moving from the classroom to the outdoor setting may equally support the transition of the borders between the schools and location of the visit.

This section has identified how the outcomes from this study could be applied in three different areas from the narrowest support of a particular aspect of the primary curriculum through to developing different pedagogical approaches in off-site visits. With this in mind the following section will discuss developments of this study and where any future foci may lie.

6.3 Future Study

Throughout the duration of this study a number of questions arose which could not be addressed within the remit of this work. These have the possibility of forming the basis for future studies which could further contribute to the area of pedagogy when teaching in the outdoor setting. A potential research area is identified with a short rationale following this.

Potential Research Area: Does teaching in the outdoor setting impact upon the curriculum taught?

This study dichotomised Bernstein's notions of classification and framing. This was due to the focus on how rather than what the children were being taught, as classification is strongly associated with the curriculum rather than communication. Initially this study was intended to focus upon teaching in primary science and so it would be of interest to explore further the impact of teaching in the outdoor setting upon the content of what the teachers teach. Sadovik (2001, p688) states that "a curriculum that is highly differentiated and separated" is defined as having strong classification where weak classification is described as "a curriculum that is integrated and in which the boundaries between subjects are fragile". A study to explore if weaker classification is characteristic of effective teaching in the outdoor setting would complement the findings of this study.

Potential Research Area: The role of MKO and ZPD in developing teachers PCK for the outdoor setting

The role of Vygotsky's More Knowledgeable Other has occupied a key place within this study and it would be beneficial to explore this further to support teachers in their pedagogical development. Continuing Professional Development and support were identified by staff in both participating schools as key to encouraging use of the outdoor setting for teaching. Further study could ascertain how this could be integrated into schools' CPD programmes as well identification of and support for the MKO. This would enable teachers to reflect upon their existing classroom-based pedagogy and be supported as they develop through their Zone of Proximal Teacher Development in order to extend their pedagogical content knowledge for specific contexts.

Potential Research Area: The impact of novelty

Although this study involved two schools which were populated by children from similar demographic and socio-economic backgrounds, little information was gained about their home lives, experience of being in the outdoors or expectations of what working in the outdoors would be. The concept of novelty having an impact on the children was detailed within this study although information about the history of the children may support teachers in effecting the physiological and psychological preparedness for working in the outdoor setting. Further study to establish variations in the nature of this preparation with a wider range of school participants would

again add depth to the framework of pedagogy for the outdoor setting that emerged from this study.

Potential Research Area: The impact of adopting an outdoor setting pedagogy on learning

This study divorced teaching and learning for the purpose of maintaining a focus on pedagogy however it was stated earlier within the work this is a difficult, if nigh impossible, separation. The Introduction and Literature Review chapters indicated many existing studies in the area of the outdoor setting focus on the children's learning and perhaps a valid extension to this study would be to evaluate the impact of teachers' using the pedagogical model presented within this work upon learning.

These areas for further study are by no means an exhaustive list but rather offer some indication of how the findings from this work can be extended and developed. The following section of this chapter will offer a short critical reflection of the study.

6.4 Critical Reflection

This section will outline the challenges and offer some evaluation of the study. It will begin with the personal challenges I faced as a researcher before considering the methodology and design of the study.

6.4.1 Personal Reflections

The introductory chapter has outlined the personal challenges I faced as a researcher in establishing my position, moving from looking for the "right" answers to recognising that there are diverse perspectives of a situation. Reading Peskin (1998) had a significant influence on me as I realised the need to acknowledge the preconceptions I held and this encouraged me to challenge my ideas and ensure, as far as possible, I was not introducing bias into the study – or at least where I knew I had assumptions or presuppositions, openly identifying them. The study was influenced by my own ideas developed through professional practice and although these were often consistent with existing literature they were not evidence-based. Undertaking this study provided me with the opportunity to explore at least some of these ideas and develop my role as a researcher. Developing researcher identity was not without its difficulties – exemplified in part by the first teachers in School B challenging this as a result of their awareness of my role within ITE. Another challenge to the perception of my role as a researcher came through School A where I spent approximately eighteen months working with the teachers. This is outlined in the Methodology chapter where the difficulties of maintaining distance as far as was manageable was threatened through the teachers increasingly wanting to converse during observations.

The Methodology chapter outlines the steps I took in order to address the possibility of looking for the answers I wanted to find and so made some progress towards satisfying Peshkin's (1988, p17) recommendation that the researcher should

"systematically identify their subjectivity throughout the course of the research". It also indicates the management of the Participant-Researcher relationship which was a constantly evolving phenomenon as time spent in the schools increased.

6.4.2 Methodology Reflections

The success of this study lay in the research design enabling the collection and collation of data which supported the research questions and allowed a framework for effective pedagogy for teaching in the outdoors to be determined. The methods chosen for the study were justified in Chapter 3. Although this work could have been approached in a variety of ways the use of observations and interviews supported with field notes served best to answer the research questions. Challenges about determining schools which were both suitable for the study in terms of their use of the outdoors and willingness to participate emerged in the early stages of this study. With having an already established relationship with many local schools in principle there was a significant amount of interest in supporting the study. At the start of the new academic year however pressures from pending inspection visits and changes in staff resulted in the number of schools able to participate diminishing. School B's involvement from the outset was in many ways serendipitous as its parity with School A supported the case study approach and enabled factors such as vastly different demographics to be eliminated. Perhaps the greatest challenge with participating schools came with piloting the interview and observation schedules; this resulted in a convenience sample of schools. There are some criticisms of this approach as outlined in the Methodology chapter however the reality of educational

research lies with requiring support from the schools and in this case the options available for piloting were very limited. The location of the schools was also limited as a result of needing to be close to my working location in order to carry out the research between teaching duties. A wider field would have further supported the study if this had been feasible. However, despite the challenge of managing participants, the observation and interview schedules were able to be evaluated and amended as a result of this process and were successful throughout the main data collection phase.

The use of computer software (NVivo 10) to support data analysis is again a debated issue, highlighted and explored in the Methodology chapter. The concerns expressed about this approach lie with the time-consuming nature of learning to use the software and the researcher's reluctance to change codes or themes. The first of these issues proved to be valid during this study and developing the skills to manage and handle the data in this way was initially very heavily time-dependent. However the benefits of having the data stored electronically became evident as familiarity with the program increased as the ease with which information could be selected, moved, searched through and stored supported the analysis process. The wider applications of NVivo were minimal. Although the NVivo program has the capacity to do much more than act as a storage and collating facility full use of this was not made within this study. The reports generated from the coding process were useful in terms of organising data and corroborating themes. Future studies as outlined in the previous section of this chapter could make more extensive use of the wider functions of the software.

6.5 Final Thoughts

Responses to the research questions, which were determined at the embryonic stages of this study, are offered in this chapter as a means of summarising the findings and discussion of the work. This chapter has also highlighted where the findings of this study can be applied in educational settings including primary schools, ITE and wider informal and off-site locations. Personal reflections on my role as a researcher and elaboration of some of the challenges faced whilst undertaking the study are presented and also indicate where future research would benefit from the experiences of these challenges.

Overall the study has developed existing ideas and challenged their application in a novel way to offer a contribution to the knowledge of pedagogy and specifically of teaching in the outdoor setting.

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Appendix 1

Condensed Sections of the Observation Schedule

(The original documents were landscape orientation and have been amended for the purpose of the appendices)

Section A used to record activities and actions at five minute intervals

Activity					
Time					
Teacher Talk					
Open instructions					
Prescriptive instructions					
Confident tone					
Teacher Questions					
Checking conceptual understanding					
Check procedural understanding					
Prior knowledge					
Assessment					
Emergent					
Planned					
Responsive					
Teacher interaction					
Teacher led talk					
Pupil led talk					
Responsive to tangential questions					
Support objective driven					
Responsive to context					
Non- teaching related interaction					
Managing Behaviour					
Clear strategies					
Stringency					
Onus of responsibility for learning (P or T)					
Onus of responsibility for behaviour (P or T)					
Established expectations for learning					
Established expectations for behaviour					
Disapproval					
Learners					
Pupils engaged and on task					
Resources support objectives					
Resources support engagement					
Resources selected for content					
Teacher Actions - grouping					
Set					
Context dependent					

Section B used to record freely notes and comments throughout the lessons

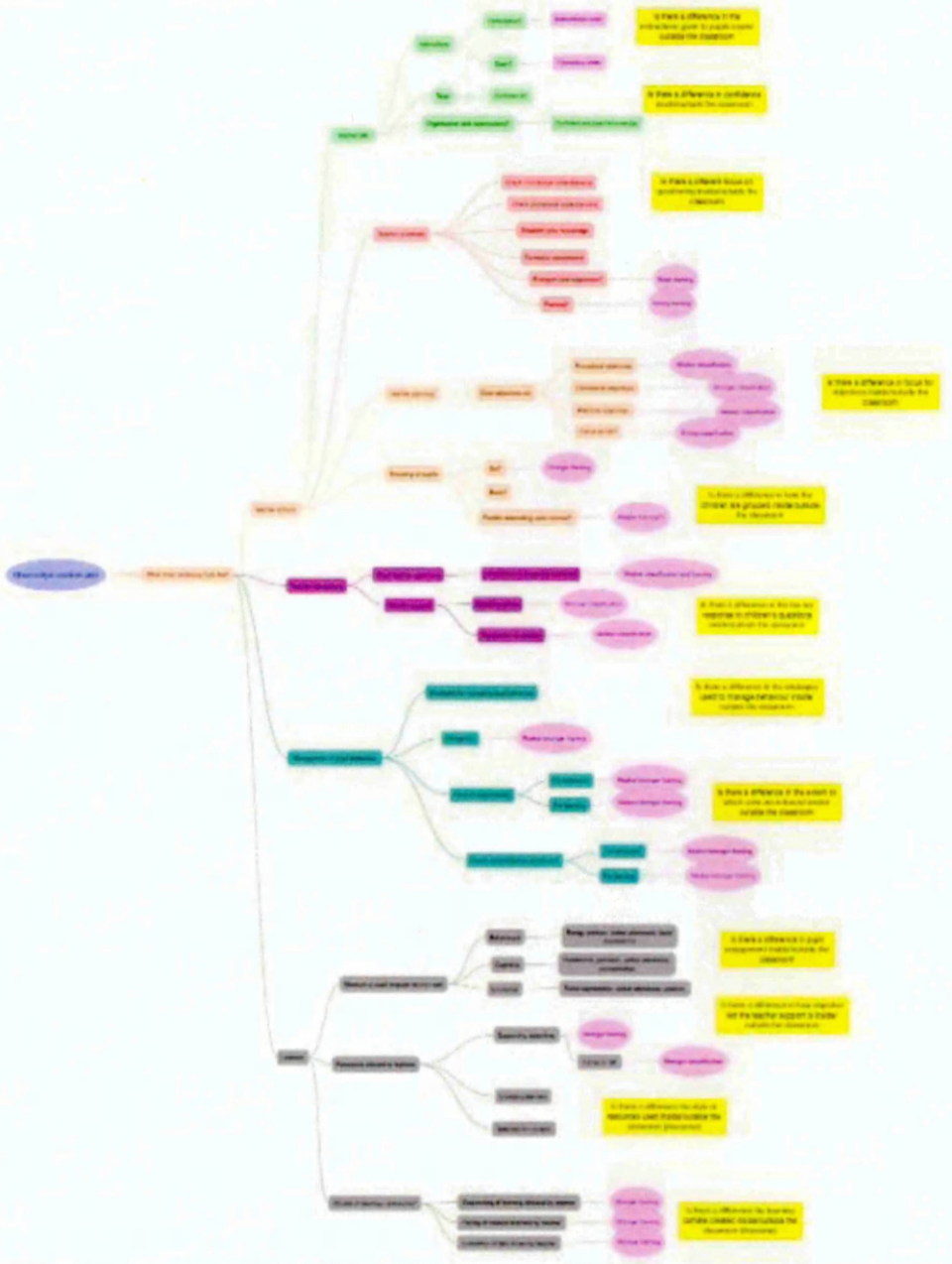
Time	Teacher talk/questions/interactions	Management of behaviour	Learners	Other

Appendix 2

Mindmap for the Observation Schedule

(This has been adapted from its original format for the purpose of the appendices. An A3 size version is included at the end of the thesis)

The mindmap outlines the aspects of teachers' teaching that were observable and links these with Classification and Framing (Bernstein 1981) (pink oval shapes) and potential questions arising from the observable features (yellow boxes)



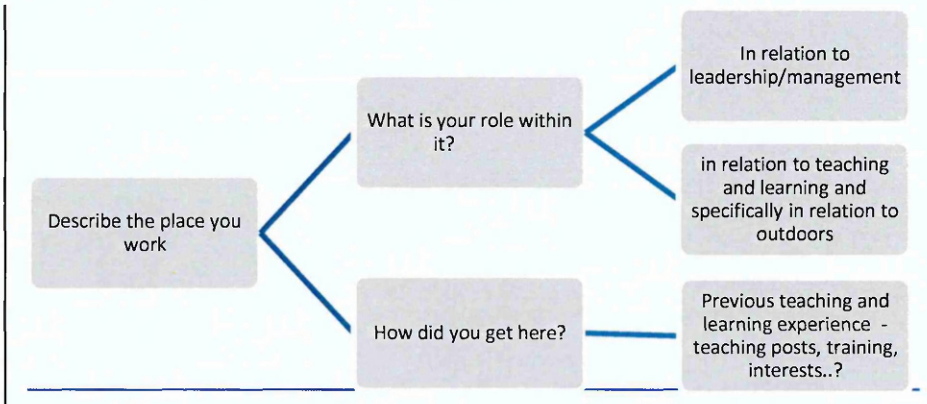
Appendix 3

Interview Schedule

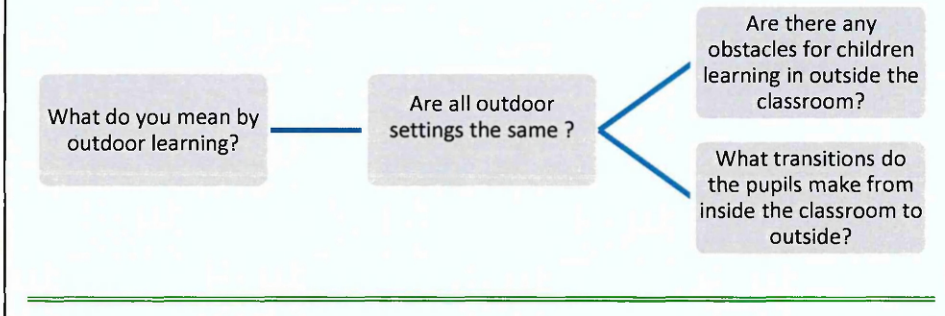
(The original documents were landscape orientation and have been amended for the purpose of the appendices)

This was created based upon Tomlinson's (1995) hierarchical focussing for interviews

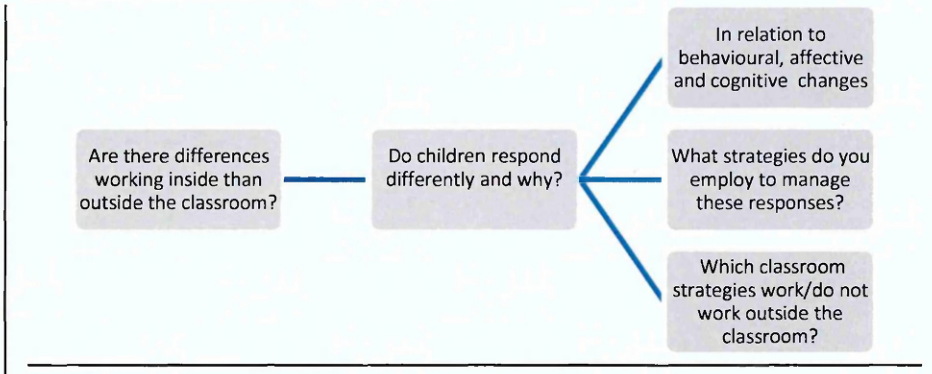
INTRODUCTION



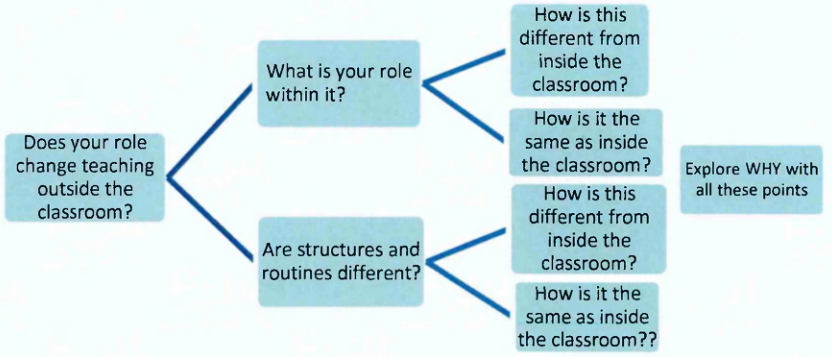
TEACHING OUTSIDE THE CLASSROOM - (A)



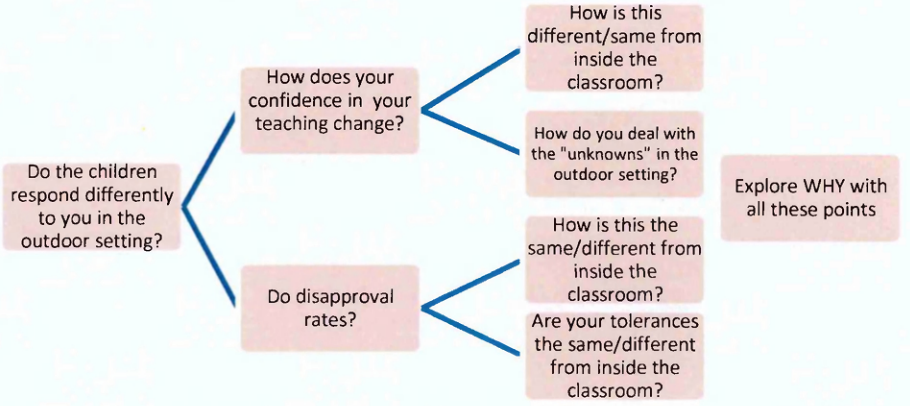
TEACHING OUTSIDE THE CLASSROOM - (B)



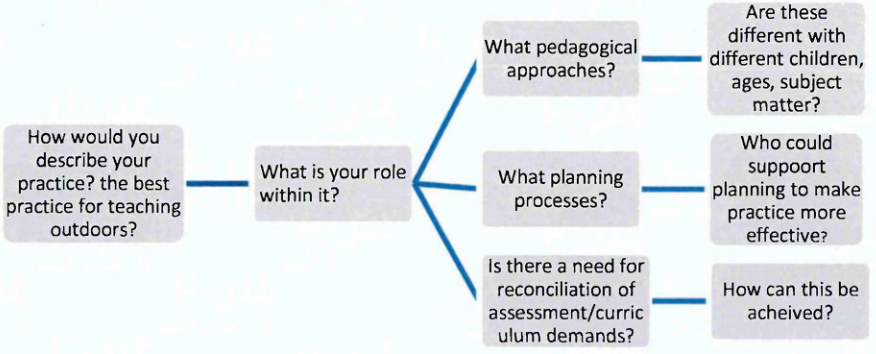
YOUR ROLE IN THE OUTDOOR SETTING (A)



YOUR ROLE IN THE OUTDOOR SETTING (B)



APPROACHES FOR TEACHING OUTDOORS



FINAL THOUGHTS: ANY OTHER COMMENTS...

***RELATED TO TEACHING OUTDOORS? ***AROUND THE COMPARISON OF CLASSROOM AND OUTDOOR BASED ACTIVITIES? ***ABOUT THE ROLES OUTSIDE THE CLASSROOM? ***ABOUT CHILDREN'S BEHAVIOUR OUTSIDE THE

Appendix 4

Sample of NVivo Analysis by Node

(This has been adapted from its original format for the purpose of the appendices)

Coding Summary By Node ASSESSMENT AND WORKING OUTDOORS

Doctorate data analysis interviews

01/12/2014 11:28

Aggregate	Classification	Coverage	Number
Of Coding References	Reference Number	Coded By Initials	Modified On

Node

Nodes\\Assessment and working outside

Document

Internals\\ transcripts\\B1

No		0.0196	1

1	LJ	15/09/2014 15:48

If it's a whole class thing, I find it a lot more challenging. Just because if it's differentiated, children can't manage themselves in groups, as I said, they can't get into a group. If I put them into differentiated groups even, they tend to need an adult to get on with the activity properly, otherwise they'll just go completely off-task. So, it makes it hard to differentiate, and then harder to assess, because I'm never sure if they're not doing the activity at the back. The constant rotation and managing it, makes it very hard to assess it. So if we're assessing it, I need another adult out there to help me manage it, so I can observe and make some assessments. So it's something that is impossible to manage on my own for assessments.

Internals\ transcripts\\B3

No	teacher	0.0225	1

1 LJ 15/09/2014 15:35

I think it's more difficult, but I think there are ways around it. I think things like photographing them, observing them, having other members of staff observing them, playing just as you would inside. So get them all back inside and then talk to them, 'What have you done,' you know, 'Now?' So there's all that AFL stuff that you can do anyway, verbally, it doesn't have to be that they're on a table, and they're doing it written down. So I think that's not too-, I don't think I'm too worried about that side.

Nodes\\ BEHAVIOUR MANAGEMENT

Document

Internals\\ transcripts\\B1

No teacher 0.0482 3

1 LJ 15/09/2014 15:42

I think they can forget sometimes. It's part of the reason that they're louder, but they're still in the learning environment. If they're in school, they associate it with a certain type of behaviour, and the learning, but if you go outside the school, it's something you'd actually have to remind them of. They think it's, sort of, just a free time to do whatever they want. They don't always understand that, you know, they need to actually be listening particularly as well. They don't seem to understand they need to listen properly. Just because you're outside and there are other things, there are a lot of distractions to manage.

2 LJ 15/09/2014 15:42

B1 With difficultly.

LH

Do you think it is more difficult?

B1

Yes, I definitely do. If we're doing things where we're going around outside, the sign walk for instance, I'd do that in groups. If it's something I can take groups for, I can get it more focused than if I took all of them at the same time. If I have to take everyone, we try and get as many adults as possible, just to try and make sure that each group has got someone reminding them of what they should be doing.

3 LJ 15/09/2014 15:45

Yes, there seems to be some sort of thing, the minute you run, you scream, so that obviously happens whenever we go out of school. A lot of them are determined to get to the front all the time. I think they try and work out where the front's going to be. You know when you're outside, they try and work out, if you ask them to go and stand in a line, they try to work out where the front of the line is, and they want to be in front of you. I don't know how I survived last year with my other class, they were really bad for it. So they're constantly looking to see where you are, to work out if they're near enough to you. If you ask them to get in a line, they can get in a line right in front of your feet.

Internals\\ transcripts\\B3

No teacher 0.0857 4

1 LJ 15/09/2014 15:32

Behaviour, organisation of what you're doing, and I'm not used to it, I'm used to being in a classroom. I know if I'm planning, I know what I'm doing. If I'm planning to go out, I struggle a little bit more with what they're doing, because obviously if they're inside, I can leave a group to just work on their own, and I can just be working. I know that they're on the table, doing their work. If you take them outside, you've got 30 and you've got to make sure they're all there, and doing what they should be doing.

2 LJ 15/09/2014 15:32

I think they're not used to it, I think they get giddy and silly. I think if you take them anywhere near the playground, they tend to think it's playtime.

3 LJ 15/09/2014 15:34

Yes, it's not so much that they can go, it's that I don't know what they're doing. I don't know what they're thinking about, because obviously if they're in the lesson, they've got to be making that progress, they've got to be learning something. If they're sitting, digging a hole for example, rather than looking at what they're supposed to be, then it's not necessarily going to be very productive for them. I think, obviously, the more you take them out and the more you do stuff, the better they'll be at that.

4 LJ 15/09/2014 15:36

They've got, on the board, they've got their own little cartoon character, if they do something well they get a point, if they get ten points they get a reward. So straightaway, as soon as you see them doing something, you can put them on. If, obviously, they're misbehaving or doing something they shouldn't be, they can go on the sad side straightaway, it's immediate. Whereas when you're outside, it's when you go back in it will be on there, so it's not as immediate. So if they do one thing, if they get their name on the sad side once, if they get their name on again, they get ten minutes timeout. So if you're outside, you tell them twice. I don't give them that ten minutes timeout, and I probably should, but it's hard to keep track when you don't have it.

Internals\\ transcripts\\B2

No teacher 0.0822 3

1 LJ 15/09/2014 15:27

Well, I try to keep on with the same behaviour management that we've got in the classroom, so that they kind of pick up that it's the same thing. They should be doing the same thing, they should be listening. So, kind of, counting down, bringing them back together like I normally would when we're inside. They do tend to respond to that quite well, but I tend to have the adults that were working with them, working with certain groups more when we go outside, so that they're kind of kept on-task. Then before the lesson, I would normally kind of brief them on what we're going to do, so they've got an idea of what's going to be happening when we're out there, so they kind of know what to expect.

2 LJ 15/09/2014 15:29

With this class, it doesn't bother me that much, because they're very very sensible, and they do know where they should be, what they should be doing, and I can rely on them to come back. Whereas last year, I would have had to have more staff with me, because they could have just gone off and come back at some point. So I think it depends on the class of the children you've got, as to how strict you've got to be with them outside. If you've got a sensible bunch, I think you can be a lot freer with them, whereas I think if you've got some that can just be complete idiots that they can just go off on one, you've got to have a lot more structure to the session.

3 LJ 15/09/2014 15:29

I don't think so. Not that I, kind of, realise. I don't think you'd address noise levels much, I guess, because in the classroom, it tends to need to be a lot quieter.

More for the fact of disrupting other classrooms around you more than anything else, whereas outside it doesn't matter so much, and it's quite nice to just let them have fun and experience it how they want to experience it, rather than, kind of, dictating things.

Internals\\ transcripts\\A4 10th October 2013

No teacher 0.0638 2

1 LJ 15/09/2014 14:53

The slight silliness, of just maybe running a little bit, or you know, kind of looking at leaves, holding the sticks and stuff. My view is if children are listening and they're engaged, I don't mind if they're holding a stick, or if they're ruffling leaves under their feet. That obviously doesn't happen in a classroom, because they haven't got those things to do. So I think you get that, but that's not a negative behaviour to me. You know, I'm a fidget, I play with things when I'm doing stuff, so I recognise that children are as well, or some children will be sorry. I think children realise it's exciting being outside, again, if the lessons are purposeful for being outside, and they want to do those sorts of activities. Like, I was just chatting to some children about it yesterday in maths, and I was asking them about what they thought of what we'd done. They were like, 'Yeah, much prefer this than being inside, sitting working in our books or on whiteboards.' So I think the children see the validity in that, so therefore want more of those experiences. So it's a natural, sort of, realising they need to behave to have those opportunities.

2 LJ 15/09/2014 14:53

No, but I think that-, I don't think my tolerances are shifting, but I think the things that I need to be-, there are more things I need to be tolerant of, because there are more things outside.

Internals\\ transcripts\\A1

No teacher 0.1433 4

1 LJ 15/09/2014 15:19

Yes, there is always going to be that aspect of the different kinds of learners, that every class will always have the couple of children that just want to run around like batman and because it is foresty type areas and you make those your target children or you let them have a couple of minutes…you know right you've experienced it now, I think that is really important so you are not telling kids off for being kids. You know, you look back at yourself and you think I did that, I did that and they are going to do that … one minute I have seen them run around and then you try to focus them and I believe that is fine … But I know that is dependent upon the teacher someone else might go straight away "stop running round a come here" [clicks fingers] but I think its ok to say you've had some time running round, it's time to focus now.

2 LJ 15/09/2014 15:22

I think that behaviour management stays the exact same but you know we have individual points for individual children but we also have group points for the children whichever group they are in all of that remains the same. The rewards remain the same. The expectations that they are accountable for learning whether they are in or out. At any point if I pull a lollypop stick out of the question cup you should be able to answer it whether you are on the other side of the orchard or whether you are on the table next to where I am. Those expectations are the same.

3 LJ 15/09/2014 15:22

LH

What about when you can't see all the children?

A1

It can concern teachers and it did concern me however I don't think it does anymore because I've got the ethos, I've got the focus and the children know their focus which is the main part of it and the children are engaged then whether I can see them behind a rock or not they know in 5 minutes I am going to come and check their work so just making it really explicit to the children means that I am more confident.

LJ 15/09/2014 15:22

Yes, they are on task. It can be three girls there and I might think they are going for a natter or those boys there are going to kick some leaves but if they are not out in 2 minutes I will go and check but they know the expectations. I am not saying they are always perfect but they might be stood having a chat about something else but when I bring them back on track it isn't hard because I just say

well go and use another area and there you go … it's those sort of things they respond to well.

Internals\\ transcripts\\A2 5th Oct 2013

No teacher 0.1352 7

1 LJ 15/09/2014 14:59

I guess you have to be open and flexible. I mean, the whole of teaching is changing, I think, in terms of not being the person with the answers. I think, in particular in those situations, you just have to be open to not knowing, and to have flexibility there.

2 LJ 15/09/2014 15:00

Yeah, I would day definitely, because at first you're like, 'Ohh, they could go anywhere.' We did a walk around, we were taking pictures of the end of summer. We're going to do Autumn to sort of compare on the iPads, and just really looking. We hadn't planned what we were going to look at, but the children really picked up on things. They were kind of, like, I had about say ten children, and they were quite spread out. I think before, I would have been like, 'No, let's make a line,' you know, 'Let's walk round,' but now I'm quite like, 'No, I understand that they're fine and exploring.' I felt more confident. I guess at the beginning of our-, I mean the beginning of my career, I was in nursery, so I did do outdoors, but we didn't do as much outdoor, like, kind of-, the children were just outdoors playing in, kind of, quite a safe place. Now we do, like, maths lessons outdoors. We do a variety of things outdoors, don't we?

3 LJ 15/09/2014 15:02

I think in terms of their active listening though, during kind of a taught session where they might have to listen to you, I think it's similar outdoors to indoors. Sometimes I find, and I know I spoke to you, I think, before about it, is that they do sometimes need a boundary when you're outdoors. So for example, when I was doing maths last week, I just drew a circle on the ground, because they were just wandering. When you want them to stop and look at you, if they're running and getting leaves and coming back, they need somewhere to come back to. So I just drew a big circle, in chalk, on the floor for them to come back to, so that they'd got the freedom to go, but then they actually knew what good behaviour was, and they knew where to come back to, and they knew what to do to

4 LJ 15/09/2014 15:02

Yeah, it's like when I was doing the walk. We came right round the back of school, and I sort of had-, so it was quite far that they could go, but I was like, 'Stop at, say, the red gate,' so I had boundaries. I don't want them running right, you know-, so we still do have boundaries but, I guess in a way, they're kind of, not more relaxed, but-, they do have freedom, but then there's also-,

5 LJ 15/09/2014 15:03

Yeah, and there's no one-, and I've done the activity with most of that class now, there's no one that I had to say, you know, 'Come back, it's not playtime, it's this,' you know. They just get on with it, they actually are engaged in what you want them to do, so that's nice. Our behaviour this year has kind of been quite challenging as well.

6 LJ 15/09/2014 15:05

I think if you were speaking to a student, or an NQT, you'd probably have-, because we're quite experienced, well, we're six, seven years into our teaching. I think you'd probably find that they would be more anxious about going outside, and their behaviour, probably, strategies, would have to change for outside and for in. I think maybe, like, I don't know. The way you get children's attention, and the way you engage them, they'd have to think about the differences.

7 LJ 15/09/2014 15:05

Yeah, be louder. The temptation is there to be louder, I think, because the children are maybe further away, or they look busy because they're kicking the pebbles, or whatever else. So I think outdoor and indoor, it's important to remember that it's not about you trying to beat what's going on. It's about just remaining, just staying calm, I suppose. Yeah, not trying to beat the outdoors, I guess, trying to work with it instead.

Internals\\ transcripts\\A3 4th Oct 2013

No teacher 0.0678 2

1 LJ 15/09/2014 15:07

Not really, because it helps me really evaluate and assess their learning. Even if they don't write it down, you can hear all the vocabulary they're using and things like that, so it's more child-led really then, outside. They're talking and telling me, showing me things, picking things up and describing it. Like today, we had a ladybird, and they were all really excited about this ladybird. They were using, like, similes and adjectives to describe it, so I thought that was really good.

2 LJ 15/09/2014 15:10

I'd say maybe the fact that they can work more with their friends. Because in class, if they're sitting next to friends, they'll talk about other things. Whereas outside, they can still work. Like we had, say, Salma and Lewis. If they were sitting next to each other in class, they'd have a conversation about things that weren't' to do with work, but when we found the ladybird, they were all excited about this ladybird, and the vocabulary was much different. Rather than just talking about what they were doing at the weekend or, you know, some random thing like that?

Internals\\ transcripts\\ (TA) 10th October 2013

No teacher 0.0269 1

1 LJ 15/09/2014 15:15

Well you see, I think it's all down to how many people are there. I mean, I was on my own with 30 children, outside, doing a maths lesson. I think that failed because I couldn't be there with this group, and then over there in the hedge with that other group, who were messing around, who weren't really on-task. So I think it depends on your available adults, whether you can manage it. Or, if it's your own class, you have a very strong relationship with that class, there's a good work ethic in that class, and it doesn't matter whether they're outside or inside they will still be on-task, then it will work. So there are all those factors about whether outdoor learning is successful or not